

The logo for Nice, featuring the word "Nice" in white sans-serif font inside a blue square.

Nice

Residential

Gate Operators

Automated Gate Solutions
Product Catalog



All gate installations must comply with UL325 and ASTM F2200 safety standards in addition to any local area codes and standards. Site, gate hardware, usage class, and other conditions will dictate the use of additional safety designs and components.

All safety related warnings and notices in this document, and any diagrams, drawings, photographs and similar content should not be considered guidance on how to make your particular site safe and code compliant. It is the responsibility of the gate system designer, installer and owner to assess appropriate safety design considerations, correct implementation and ongoing maintenance of any system.

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Nice Residential Gate Operators Catalog

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All specifications are subject to change without notice. **PDF available online at hysecurity.com or contact your distributor.**
partners.hysecurity.com/extranet/

Warranty: hysecurity.com/warranty



Why Nice?

Nice is a worldwide recognized industry leader of automated gate and perimeter security solutions.

The Nice brand features residential and commercial gate operators, from elegant linear actuators to refined swing and slide gate operators.

Residential Gate Operators Product Catalog



View the latest parts diagrams from anywhere.

- Quick search results by operator
- Easy to find part diagrams and part numbersd
- Always updated
- Available digitally anywhere
- Download and print materials as needed

Vanguard 3501 Swing

CHBOX35 Motor Chassis and ABOX35 Arm Assembly

This drawing is a representation and should be used for parts reference only.

Part Name	Part Number
Arm Assembly	ABOX35
Arm Assembly, Adjuster	10021790
Bracket, Gate Attach Kit	10021290
Bracket, Post Mount	10038315
Chain, #50	MX5622
Chassis Assembly, 3501	CHBOX35
Collar and Magnet	10021490
Cover, Plastic	MX4774
Motor Assembly	MX5420
Motor Assembly (retrofit kit for units with 1050US controller)	MX5421
Limit Block Assembly	10058890
Sprocket	MX5624
Terminal Block	TB-8
Toggle Switch	10024290
Torque Limiter	10040690

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Parts Diagrams are located at the back of this book as an addendum. Diagrams and support material can also be found on the Nice | HySecurity Support Center. <https://support.hysecurity.com>

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Q Apcl

Swing Gate / Apollo 816

Brochures and Spec Sheets, Operator

Manuals, Operator

Part

Apollo Linear Actuator Spec Sheet

Apollo 1500 Linear Actuator System (816 arm & 636 Control Board) Installation Reference Manual
Changed DIP Switch illustration on page 37 to show Dip Switch 1 as OFF (not ON) to ...

Apollo 816 Linear Actuator Installation Reference Manual
How to install the Apollo 816 linear actuator without a system

Apollo 816 Linear Actuator 120 Degree Install Instructions
How to install the Apollo linear actuator at a 120 Degree angle

Apollo 816 Linear Actuator Part Diagrams

Swing Gate

Vertical Lift

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Slide Gate Operators

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Nice

Juno

Compact modern design, dependable operation.

Powerful motor moves gates up to 800lbs

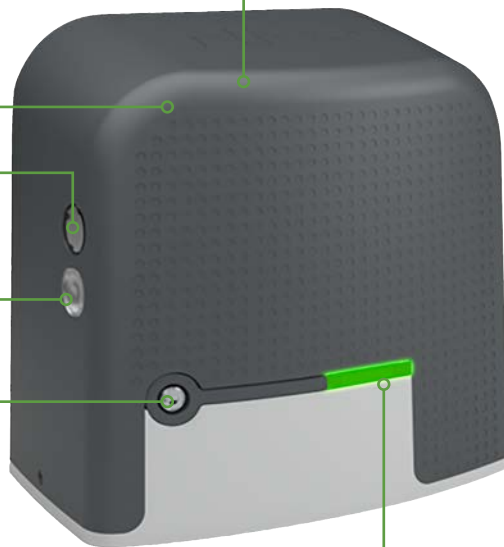
Durable UV stabilized enclosure

Internally mounted photo eye

Driveway light offers visibility while in motion and stays on for 20 seconds after reaching the open or close limit

Lockable manual release for security and convenience

Red/Green status indicator lets you know when the gate is opening or closing



Powerful: Move gates up to 800 lbs and 40 ft long.



Quiet: Soft-start and soft-stop for smooth gate operation.



Capable: Simple, powerful, and efficient Mercury 310 controller.



Flexible: AC or Solar power options.



Sleek: Integrated photo eye and driveway light.



Secure: Lockable front-mounted manual release.



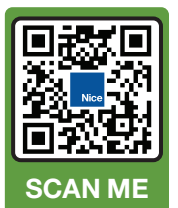
Attractive: Modern enclosure design suits residential environments.



Reliable: Battery power ensures operation even in power outages.



Configurable: Adjustable slowdown points can be set with the easy to program Mercury 310 Controller



Mercury 310
Controller



- Simple to setup controller parameters – no special programming needed
- Solar-ready with integrated battery charger and MPP technology
- One-step firmware update process
- Very low standby current maximizes battery life in solar installations
- Built-in UL 325 Type C entrapment protection for added safety**

Technical Specifications

Model	Juno 310 AC		Juno 310 Solar
Battery Included	(1) 8Ah battery		(2) 8Ah batteries (14Ah total)
Duty Cycle	Continuous duty		
Drive	Electromechanical		
Rate of Travel	1 ft/sec (30 cm/s)		
Gate Length Max.	40 ft (12m)		
Gate Weight Max.	800 lb (362 kg)		
Temperature Rating	-4° to 122° F (-20° to 50° C)		
Operating Voltage	12VDC		
Input Voltage	120v AC Input	12v rated solar panel†	
Idle Current	10mA		
Accessory Power	Regulated 12V 500mA always on (2 locations); Regulated 12V 500mA standby off (2 locations)		
Included Accessories	OXIBD/A receiver, (2) ON2E/A transmitters, (1) BlueBUS reflective photo eye, (1) internally mounted BlueBUS reflective photo eye and light. 30' #40 corrosion-resistant chain.		
Communication	BlueBUS, USB port, OXI		
User Controls	Mercury 310 Controller		
Enclosure	17.2" w x 16" h x 10.8" d (43.8 w x 40.8 h x 27.5 d cm)		
Finish	Molded UV stabilized, durable cover		
ETL Listed (UL 325)	Usage Class I, II		
Warranty	3 year w/product registration		

*If the operator is AC powered, the battery, (included, but not required) if present, will be a backup for when AC power is lost. If the operator is solar powered, a 12V solar panel is required.

The Juno 310 Solar model comes with (2) 8Ah batteries. Depending on the number of connected accessories, cycles per day and number of sunlight hours per day, an additional battery may be required to meet your solar application needs.

**A minimum of one monitored entrapment protection device in each direction is required by UL325 for all slide gate operators. The installer is required to ensure all UL325 and ASTM2656 requirements are met.

†max OCV = 30VDC, Vmpp =16-20v

The Mercury 310 controller is equipped with an internal battery charger.



Juno Models

Model	Part number	Description	Weight (lbs)	Dimensions	Freight Class
Juno 310 AC	O-Juno 310 AC	AC, Mercury 310 controller	70 lbs	17"w x 11"d x 16"h	70
Juno 310 Solar	O-Juno 310 Solar	Solar, Mercury 310 controller	75 lbs	17"w x 11"d x 16"h	70

Juno Parts and Accessories

Part Name	Part Number	Description
Anchor Kit	MX5805	Juno anchor hardware kit
Antenna, Directional, 433.92 MHz	ABF/A	Adjustable whip antenna with mounting bracket, removable terminal block and 10 ft coaxial cable for Nice 433.92 MHz receivers.
Battery, 8Ah	MX000909	Single 8Ah battery
Battery Kit, External, 35Ah	MX5570-35	35Ah external battery kit assembly with enclosure
Battery Kit, External, 70Ah	MX5570-70	70Ah external battery kit assembly with enclosure
Chain #40, 35 ft	72520001	Chain #40, 35 ft, with 2 Master Links.
Controller, Mercury 310	MX4920	Mercury 310 controller, UL325 7th Edition Compliant
Cover, Assembly, Juno	MX5733	Juno cover assembly
Detector, Probe, 12V	217	Exit probe kit, 12V, includes probe and controller.
Edge Channel, 10 ft	MX4219-03	Aluminum channel, mounts low and high profile edge sensors, 10 ft.
Edge Channel, 5 ft	MX4219-02	Aluminum channel, mounts low and high profile edge sensors, 5 ft.
Edge Sensor Assembly, Channel Mount, High Profile	AS1502-0440-05	High profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.75 inch (1.5 m, 25 x 45 mm).
Edge Sensor Assembly, Channel Mount, Low Profile	AS1502-0430-05	Low profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.25 inch (1.5 m, 25 x 30 mm).
Edge Sensor Assembly, Wraparound, Round	AS1501-0760	Round ASO wraparound edge sensor for use on 2 inch diameter pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).
Edge Sensor Assembly, Wraparound, Square	AS1501-0790	Square ASO wraparound edge sensor for use on 2 inch square pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).

Juno Parts and Accessories

Part Name	Part Number	Description
Edge Sensor Roll, Channel Mount, High Profile, 82 ft	AS1502-0440	High profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.75 inch (25 m x 25 x 45 mm) Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
Edge Sensor Roll, Channel Mount, Low Profile, 82 ft	AS1502-0430	Low profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.25 inch (25 m x 25 x 30 mm). Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
End Cap, Edge, High Profile, 10k	AS1804-1630	Replacement end cap for high profile ASO edge sensor, with 10k resistive termination, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, No Resistor	AS1804-0490	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, Wire Leads	AS1804-0650	Replacement end cap for high profile ASO edge sensor, with wire leads, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, Low Profile, 10K	AS1804-1620	Replacement end cap for low profile ASO edge sensor, with 10k resistive termination, 1 x 1.25 inch (25 x 32 mm).
End Cap, Edge, Low Profile, No Resistor	AS1804-0480	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.25 inch (25 x 32 mm).
End Cap, Edge, Low Profile, Wire Leads	AS1804-0640	Replacement end cap for low profile ASO edge sensor, with wire leads, 1 x 1.25 inch (25 x 32 mm).
Gooseneck, stand, 69 in	MX5153	Pedestal, black powder coated 14-guage steel, 69 inch overall height.
Idler, Assembly, Juno	MX4280	Idler assembly. Includes (2) idlers
Keypad, 100-code, wired	MX5150	Security Brands wired keypad with 100 code capacity.
Keypad, EDSWG, Wireless	EDSWG/A	Battery-powered wireless keypad.
Keypad, wireless, 433 MHz	MX5151	Security Brands wireless keypad and transceiver with 500 code capacity.
Lock Assembly, Juno	CM005	Lock and key assembly for Juno
Magnet, Target Assembly, Juno	MX4430	Target magnet assembly for slide gate operators
Motor Assembly, Juno	MX5732	Motor assembly for Juno operator
Mounting Kit, Post, Juno	MX5710	Post mount kit for Juno operator
Mounting Kit, Base Riser, Juno	MX5583	4" Base riser kit for Juno operator

Juno Parts and Accessories

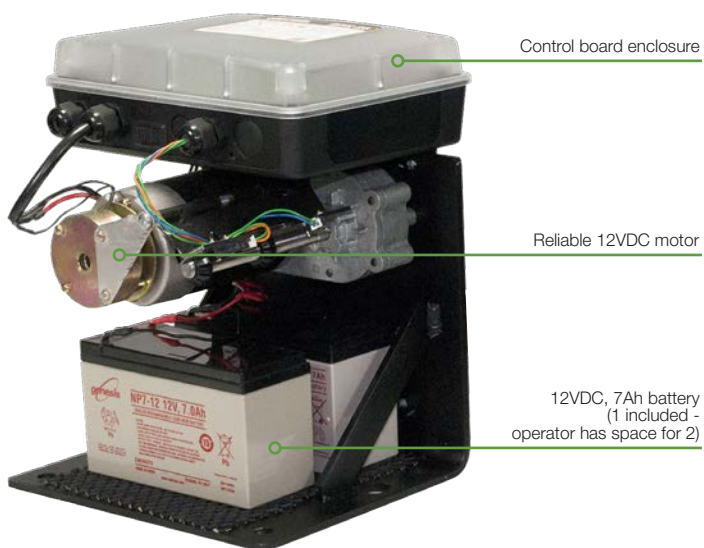
Part Name	Part Number	Description
Photo Eye w/BlueBUS, Reflective, Adjustable, Medium	EPMORB/A	Reflective photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in large size housing. Requires BlueBUS enabled controller. For use with Mercury 310/1050/XBA3/BCU1 and SmartCNX, SmartTouch725 controllers.
Photo Eye w/BlueBUS, Through-Beam, Adjustable	EPMOB/A	Through-beam photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in medium size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.
Photo Eye w/BlueBUS, Through-Beam, Adjustable, Large	EPLOB/A	Through-beam photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in large size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1, SmartCNX, SmartTouch 725 and Mercury 310 Controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable	EPMB/A	Through-beam photo eye with Nice BlueBUS communications technology and medium size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1, SmartCNX, SmartTouch725 and Mercury310 Controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable, Metal	EPMAB/A	Through-beam photo eye with Nice BlueBUS communications technology and solid, durable, medium size cast metal alloy housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.
Plate, Foundation, Juno	PD2349A0000	Foundation plate for Juno
Receiver, OXI, Long Range with LoRa Technology	OXILR/A	OXI bi-directional long range receiver, 433.92 MHz, 1024 codes with LoRa Technology, red fascia.
Receiver, OXIBD, Multi Channel	OXIBD/A	OXI bi-directional receiver, multiple channels, 433.92 MHz, 1000 code memory. Compatible with all ERA and INTI remotes and bi-directional remotes.
RTE Unit, wireless, button	MX5152	Remote exit button, for use with gooseneck stand on secure side of a gate.
Signs, Moving Gate Warning, English	MX3193-01	Two UL 325 moving gate warning signs, English, 8.5 x 11 inch aluminum, includes 8 zip ties.
Solar Charge Regulator	SG-4	Solar charge regulator for 12V solar arrays up to 60W.
Solar Panel, 12V 5W, w/Mounting Bracket	201	Solar Panel, 12V 5W, includes mounting bracket.

Juno Parts and Accessories

Part Name	Part Number	Description
Solar Panel, 12V 10W, w/Mounting Bracket	210	Solar Panel, 12V 10W, includes mounting bracket.
Solar Panel, 12V 20W, w/Mounting Bracket	212	Solar panel, 12V 20W, includes mounting bracket.
Solar Panel, Bracket, Mounting, 30W - 60W	10046890	Mounting bracket for 12V 30W to 60W solar panels.
Solar Panel, Bracket, Mounting, 5W - 20W	208	Mounting bracket for 12V 5W to 20W solar panels.
Sprocket, Drive, #40 Chain, 22 Tooth	MX5338	Drive sprocket, #40 Chain, 22 Tooth with Keyway, for Juno.
Transmitter, Remote, Era One, 2 Channel	ON2E/A	Era One remote transmitter, 2 channels, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, 4 Channels	ON4E/A	Era One remote transmitter, 4 channel, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, Bi-Directional Long Range, LoRa	ON3ELR/A	Era One bi-directional long range remote transmitter with LoRa technology, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel Black	INTI2/A	Inti remote transmitter, 2 channel, 433.92 MHz, black fascia.
Transmitter, Remote, Inti, 2 Channel Blue	INTI2B/A	Inti remote transmitter, 2 channel, 433.92 MHz, blue fascia.
Transmitter, Remote, Inti, 2 Channel Lilac	INTI2L/A	Inti remote transmitter, 2 channel, 433.92 MHz, lilac fascia.
Transmitter, Remote, Inti, 2 Channel Red	INTI2R/A	Inti remote transmitter, 2 channel, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel, Yellow	INTI2Y/A	Inti remote transmitter, 2 channel, 433.92 MHz, yellow fascia.
Transmitter-Receiver Kit, LoRa Technology	ONELRKIT/A	Includes 2 Era One bi-directional long range transmitters (ON3ELR/A), 1 OXI bi-directional receiver (OXILR/A), and 1 relay adapter (OX2UBP) to use with non-OXI port controllers.

GPX-SL25

Dependable Safety. For use with gates up to 24 ft and 650 lbs.



Dimensions: Height: 12.5", Depth: 12", Width: 10.5".



Shipping Weight: 50 lbs. (22.7 kg) Meets UPS shipping standards.



Class of Operation: Class I.



Solar Power: Second battery recommended (not included). 10-watt Solar Panel (SOLAR10).



Safety Listings: System Certified with UL325 7th Edition safety standards, ETL listed.



Warranty: 2 Years (Residential application).



Optional Post Mount Adapter or Adjustable Pad Mount Adapter:

Post Mount Adapter requires R4983.

Pad Mount Adapter (R4984) raises operator 6" to 10" above existing concrete pad.



GPX-SL25 Model

Model	Part number	Weight (lbs)	Dimensions	Freight Class
GPX-SL25	GPX-SL25	46	18"w x 12.5"d x 14"h	70

FEATURES

- Full systems capable "add on ready" heavy-duty control board includes adjustable obstruction sensing, gate sequencing and auto close settings (OFF and 3–120 seconds)
- Includes a built-in internal friction disc brake/lock
- Optional post mount adapter available (R4983 - not included)
- Chain disconnect for manual operation
- Rated for up to 100 cycles daily for residential applications

MECHANICAL

- Operating temp: -5 F (-21C) to +160 F (71 C)
- Opening time: 1 ft. (.31 m) per second maximum
- 25 ft. of #41 chain with master link
- Fully compatible accessory terminal block provides connections for safety loops, exit wands, keypads, card readers, phone systems, etc.
- Operation, diagnostic and safety alarms
- Inherent obstruction sensing

ELECTRICAL/POWER

- 12 VDC / 7.0 amp hour, sealed, rechargeable battery (included)
- Battery charge is maintained by regulator on control board
- Powered by a reliable 12VDC (1/4HP), case hardened steel gear reducer
- "Sleep draw" is 40 mA; "active draw" is 2 to 9 amps

SUGGESTED ACCESSORIES

- Wireless Vehicle Sensor (R4500)
- Solar Panel (SOLAR10)
- Transmitters (RB741/RB742)
- Digital Keypad (F310)

GPX-SL25 Parts and Accessories

Part Name	Part Number	Description
Battery, 7Ah	2500-1118	Single 7Ah replacement battery.
Button, Unlit	RB101	Push button for open/close/stop operation of gate opener; up to 1000' with 16 gauge wire.
Gooseneck, Pedestal	FM100	Aluminum mounting post for access control devices.
Intercom, Residential	F6100MBC	Residential intercom system with keypad and indoor base station.
Keypad, Wireless	F310	Wireless keypad with 25 code capacity; Powered by (3) AA batteries (not included).
Limit Switch, Kit	R4065	Limit switch kit for GPX-SL25 (Includes switches, hardware and PCB).
Lock, Pin	FM133	Substitute front mount clevis pin with pin lock to prevent operator tampering and theft.
Mount, Pad, Adapter Plate	R4984	Galvanized adjustable pad mount adapter mount.
Mount, Post, Adapter Plate	R4983	30" galvanized post mount adapter mount.
PCB, 2016	R5211-02	PCB for GPX-SL25, post 2016.
Photo Eyes, Through Beam	R4222	Through beam photo eye for non-contact entrapment protection.
Receiver, Universal	RB709U-NB	Receiver connects to any brand gate or garage door opener; up to 100' range.
Sensor, Vehicle, Wireless	R4500	Wireless vehicle sensor to open gate; 100' range between transmitter and receiver.
Sensor, Vehicle, Wired	FM139	50' driveway vehicle sensor to open gate; Also available in 100' and 150'.
Solar Panel, 12V 10W	SOLAR10	12V 10W solar panel.
Transformer, 18V	RB570	Replacement transformer to maintain battery charge; 18V 2200mA.
Transmitter, Remote, keychain, 1-button	RB741	1-button transmitter; For use with RB709U-NB universal receiver.
Transmitter, Remote, keychain, 2-button	RB742	2-button transmitter; For use with RB709U-NB universal receiver.
Wire, Low Voltage	RB509-100	100' roll 16 gauge, stranded, dual conductor low voltage wire; UV treated, PVC coated.

PRO-SL2000B

Heavy Duty Slide Gate Opener. For use with gates up to 30 ft. and 1,000 lbs.



Heavy duty slide gate operator with built-in internal lock



Capable: Full systems capable "add on ready" heavy-duty control board includes adjustable obstruction sensing, gate sequencing and auto close settings (0-120 seconds).



Weight: PRO-SL2000B series operator will handle gates weighing up to 1,000 lbs. (453.6 kg).



Cycle: Rated for up to 100 cycles daily on residential and light commercial applications.



Easy Installation: (2) Easy to install 4 ft. (1.2m) post mounts (included).



Brake/Lock: Includes a built-in internal friction disk brake/lock.



Warranty: 2 Years (Residential application).



Safety Compliant: System Certified with UL325 5th edition safety standards, ETL listed.



Dual Gates: For dual gate applications, add model PRO-SL2200B.



Solar Compatible: Requires additional battery and solar panel.



PRO-SL2000B Models

Model	Part number	Description	Weight (lbs)	Dimensions	Freight Class
PRO-SL2000B	PRO-SL2000B	Primary operator includes: Battery, transformer, 1-button transmitter and receiver	82	29"w x 13"d x 22"h	70
PRO-SL2200B	PRO-SL2200B	Secondary operator for dual gate use with PRO-SL2000B	77	29"w x 13"d x 17"h	70

ELECTRICAL

- 12VDC / 7.0 amp hour, sealed, rechargeable battery (included). Battery charge is maintained by a 120V AC/60 Hz input and 18V AC at 40VA output transformer, rectified to 14V DC through control board
- Powered by a reliable 12VDC (1/4 HP), with integral case hardened steel gear reducer
- Charging regulated circuit on control board. "Sleep draw" is 40 mA; "active draw" is 2 to 9 amps

MECHANICAL

- Operating temp: -5 F (-21C) to 160 F (71 C)
- Speed: 1 ft. (.31 m) per second
- 32 ft. of #41 chain with master link (included)
- Fully compatible accessory terminal block provides connections for safety loops, exit wands, keypads, card readers, phone systems, etc
- Operation, diagnostic and safety alarms
- Inherent obstruction sensing featuring Dual Sense Technology Stall Force
- Soft start/soft stop feature for long mechanical life expectancy
- Adjustable auto close timer (3-120 seconds)
- Mechanical limit controls

PRO-SL2000B Parts and Accessories

Part Name	Part Number	Description
Battery, 7Ah	2500-1118	Single 7Ah replacement battery.
Button, Unlit	RB101	Push button for open/close/stop operation of gate opener; up to 1000' with 16 gauge wire.
Gooseneck, Pedestal	FM100	Aluminum mounting post for access control devices.
Intercom, Residential	F6100MBC	Residential intercom system with keypad and indoor base station.
Keypad, Wireless	F310	Wireless keypad with 25 code capacity; Powered by (3) AA batteries (not included).
Limit Switch, Kit	R4420	Limit switch and plate kit for PRO-SL2000B.
Lock, Pin	FM133	Substitute front mount clevis pin with pin lock to prevent operator tampering and theft.
Motor, Gear, with Brake	RB205B	Gear motor with brake for PRO-SL2000B and PRO-SL2200B.
Mount, Pad, Bracket	SGMP	Kit used to mount PRO-SL2000B gate operator to a concrete pad.
PCB, 2016	R5211-01	PCB for PRO-SL2000B, post 2016.
Photo Eyes, Through Beam	R4222	Through beam photo eye for non-contact entrapment protection.
Receiver, Universal	RB709U-NB	Receiver connects to any brand gate or garage door opener; up to 100' range.
Sensor, Vehicle, Wireless	R4500	Wireless vehicle sensor to open gate; 100' range between transmitter and receiver.
Sensor, Vehicle, Wired	FM139	50' driveway vehicle sensor to open gate; Also available in 100' and 150'.
Solar Panel, 12V 10W	SOLAR10	12V 10W solar panel.
Transformer, 18V	RB570	Replacement transformer to maintain battery charge; 18V 2200mA.
Transmitter, Remote, keychain, 1-button	RB741	1-button transmitter; For use with RB709U-NB universal receiver.
Transmitter, Remote, keychain, 2-button	RB742	2-button transmitter; For use with RB709U-NB universal receiver.
Wire, Low Voltage	RB509-100	100' roll 16 gauge, stranded, dual conductor low voltage wire; UV treated, PVC coated.

Nice

7251/7351

Durable construction. Dependable performance. Flexible pad-mount or post-mount with superior solar performance.



Large cabinet provides enough space for large backup batteries in solar installations



Powerful: Move gates up to 800 lbs and 25 ft long.



Low maintenance: Easy to install and maintain.



Convenience: Designed for easy access to limit switch adjustment.



Battery: 12VDC battery powered.



Flexible: AC or Solar power options available.



Durable: Power coated black steel enclosure.



Technology: Nice BlueBUS 2-wire system self-identifies monitored photo eyes.



Made in USA: Designed, tested and built within USA from globally sourced materials.



Technical Specifications

Model	Apollo 7251 Slide		Apollo 7351 Slide	
Operator Kit	7251 - Post Mount		7351 - Pad Mount	
Duty Cycle	Varies based on charging capacity*			
Drive	Electromechanical			
Rate of Travel	1 ft/sec (30 cm/s)			
Gate Length Max.	25 ft (7 m)			
Gate Weight Max.	800 lb (362 kg)			
Temperature Rating	-4° to 122° F (-20° to 50° C)			
Operating Voltage	12VDC			
Input Voltage	12VDC or 24VDC			
Idle Current	17mA			
Accessory Power	12VDC and 24VDC 0.3A each location			
Included Accessories	OXIBD bi-directional receiver, one set of BlueBUS through beam photo eyes			
Communication	BlueBUS, BUST4, USB port, OXI			
User Controls	1050 Controller			
Relays	3 programmable			
Enclosure	22w x 22h x 15.5d inch (56w x 56h x 39.4d cm)		20.5w x 26.5h x 18d inch (52w x 67.3h x 45.7d cm)	
Control Box Finish	Powder coated black steel			
ETL Listed (UL 325)	Usage Class I, II			
Warranty	3 year w/product registration			

* Actual battery backed up cycles will depend on gate resistance to travel, cycle length, battery health, ambient temperature, accessory power draw and frequency of gate cycles during power outage.
Note: Battery and battery charger or solar panel required for operation, not included.

Residential slide gate. 12VDC battery powered, AC or Solar. Moves up to 800 lb/25 ft gate leaf. Easy mechanical chain release allows manual operation of the gate without dropping the chain. Model operates with 1050 controller. Operator includes 35 ft #40 roller chain, OXI receiver, ABF antenna and one set of BlueBUS through beam photo eyes.

Note: Battery and battery charger or solar panel required for operation, not included

7251/7351 Models

Model	Part number	Description	Weight (lbs)	Dimensions	Freight Class
Apollo 7251 Slide	O-7251	Post mount, 1050 Controller	118	40"w x 48"d x 41"h	70
Apollo 7351 Slide	O-7351	Pad mount, 1050 Controller	169	40"w x 48"d x 43"h	70

7251/7351 Parts and Accessories

Part Name	Part Number	Description
Antenna, Directional, 433.92 MHz	ABF/A	Adjustable whip antenna with mounting bracket, removable terminal block and 10 ft coaxial cable for Nice 433.92 MHz receivers.
Battery Charger, 1.5A	404C	Automatic battery charger/maintainer, 1.5A maximum output, requires 120VAC.
Bearing, Flange, 7251/7351	UCFL202	Flange bearing for 7251/7351.
Bracket, Blue Gearbox	10052090	Bracket for blue gearbox, 7251/7351.
Bracket, Chain	10020715	Black chain bracket, each, for 7000/8000 series operators.
Bracket, Retrofit Kit, for 1050 control board	10055090	Retrofit brackets, for mounting the 1050 controller in 11111B control boxes.
Brush Set	71020049	Motor brush set for HTI motors in either the 7200 or 7300 operator, 2 brushes.
Bushing, Top, Limit Switch	A2009	Top Limit Switch Bushing.
Chain #25, Drive, 7251	10029690	Drive chain #25 for 7251 with master C/L.
Chain #25, Drive, 7351	10029790	Drive chain #25 for 7351 with master C/L.
Chain #40, 35 ft	72520001	Chain #40, 35 ft, with 2 Master Links.
Chain Cover, 7251	10032590	Replacement chain cover for 7251, black.
Chain Cover, 7351	10030590	Replacement chain cover for 7351, black.
Chain, Threaded Bolt	10003115	Threaded bolt for chain, hardware kit.
Controller, 1050	1050US	1050 Controller for single or dual applications, UL325 7th Edition Compliant.
Cover, 7351	10030490	Black powder coated cover for model 7351.
Detector, Probe, 12V	217	Exit probe kit, 12V, includes probe and controller.
Edge Channel, 10 ft	MX4219-03	Aluminum channel, mounts low and high profile edge sensors, 10 ft.
Edge Channel, 5 ft	MX4219-02	Aluminum channel, mounts low and high profile edge sensors, 5 ft.

7251/7351 Parts and Accessories

Part Name	Part Number	Description
Edge Sensor Assembly, Channel Mount, High Profile	AS1502-0440-05	High profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.75 inch (1.5 m, 25 x 45 mm).
Edge Sensor Assembly, Channel Mount, Low Profile	AS1502-0430-05	Low profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.25 inch (1.5 m, 25 x 30 mm).
Edge Sensor Assembly, Wraparound, Round	AS1501-0760	Round ASO wraparound edge sensor for use on 2 inch diameter pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).
Edge Sensor Assembly, Wraparound, Square	AS1501-0790	Square ASO wraparound edge sensor for use on 2 inch square pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).
Edge Sensor Roll, Channel Mount, High Profile, 82 ft	AS1502-0440	High profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.75 inch (25 m x 25 x 45 mm) Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
Edge Sensor Roll, Channel Mount, Low Profile, 82 ft	AS1502-0430	Low profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.25 inch (25 m x 25 x 30 mm). Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
End Cap, Edge, High Profile, 10k	AS1804-1630	Replacement end cap for high profile ASO edge sensor, with 10k resistive termination, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, No Resistor	AS1804-0490	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, Wire Leads	AS1804-0650	Replacement end cap for high profile ASO edge sensor, with wire leads, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, Low Profile, 10K	AS1804-1620	Replacement end cap for low profile ASO edge sensor, with 10k resistive termination, 1 x 1.25 inch (25 x 32 mm).
End Cap, Edge, Low Profile, No Resistor	AS1804-0480	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.25 inch (25 x 32 mm).
End Cap, Edge, Low Profile, Wire Leads	AS1804-0640	Replacement end cap for low profile ASO edge sensor, with wire leads, 1 x 1.25 inch (25 x 32 mm).
Gearmotor, Retrofit Kit	10029290	Retrofit gearmotor assembly, for 7251/7351 series operators, includes motor, gearbox, sprocket, bracket, chain.
Gooseneck, stand, 69 in	MX5153	Pedestal, black powder coated 14-guage steel, 69 inch overall height.
Hardware Kit, 7251	10016790	Hardware kit for 7251.
Hardware Kit, 7351, 8300/8500	10016690	Hardware kit for 7351 and 8300/8500.
Keypad, 100-code, wired	MX5150	Security Brands wired keypad with 100 code capacity.

7251/7351 Parts and Accessories

Part Name	Part Number	Description
Keypad, EDSWG, Wireless	EDSWG/A	Battery-powered wireless keypad.
Keypad, wireless, 433 MHz	MX5151	Security Brands wireless keypad and transceiver with 500 code capacity.
Lid, Control Box	10053890	Replacement control box lid for 7251, black.
Limit Block, Plastic, No Switch	A2003P	No switch plastic limit block.
Limit Sub Assembly	10040390	Limit assembly, internal tower style, for 7251/7351 operators with internal limits.
OVBt, Bluetooth Module	OVBt	Bluetooth connection module for Oview interface.
Photo Eye w/BlueBUS, Reflective, Adjustable, Medium	EPMORB/A	Reflective photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in large size housing. Requires BlueBUS enabled controller. For use with Mercury 310/1050/XBA3/BCU1 and SmartCNX, SmartTouch725 controllers.
Photo Eye w/BlueBUS, Through-Beam, Adjustable	EPMOB/A	Through-beam photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in medium size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.
Photo Eye w/BlueBUS, Through-Beam, Adjustable, Large	EPLOB/A	Through-beam photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in large size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1, SmartCNX, SmartTouch 725 and Mercury 310 Controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable	EPMB/A	Through-beam photo eye with Nice BlueBUS communications technology and medium size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1, SmartCNX, SmartTouch725 and Mercury310 Controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable, Metal	EPMAB/A	Through-beam photo eye with Nice BlueBUS communications technology and solid, durable, medium size cast metal alloy housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.
Programming unit for device BUS T4 connection	OVIEW/AR01	Unit for control, programming and diagnostics for devices equipped with BUST4 connection, for use with 1050 or XBA3 controllers Note: Firmware updates on 1050 and XBA3/U controllers require the OVIEW/A and the OVBt.
Proximity Switch, w/25 inch Lead	2004L	Proximity switch with 25 inch lead.
Receiver, OXI, Long Range with LoRa Technology	OXILR/A	OXI bi-directional long range receiver, 433.92 MHz, 1024 codes with LoRa Technology, red facia.

7251/7351 Parts and Accessories

Part Name	Part Number	Description
Receiver, OXIBD, Multi Channel	OXIBD/A	OXI bi-directional receiver, multiple channels, 433.92 MHz, 1000 code memory. Compatible with all ERA and INTI remotes and bi-directional remotes.
Release, Quick, 7251/7351	10039790	Quick release for 7251/7351.
RTE Unit, wireless, button	MX5152	Remote exit button, for use with gooseneck stand on secure side of a gate.
Signs, Moving Gate Warning, English	MX3193-01	Two UL 325 moving gate warning signs, English, 8.5 x 11 inch aluminum, includes 8 zip ties.
Solar Charge Regulator	SG-4	Solar charge regulator for 12V solar arrays up to 60W.
Solar Panel, 12V 5W, w/Mounting Bracket	201	Solar Panel, 12V 5W, includes mounting bracket.
Solar Panel, 12V 10W, w/Mounting Bracket	210	Solar Panel, 12V 10W, includes mounting bracket.
Solar Panel, 12V 20W, w/Mounting Bracket	212	Solar panel, 12V 20W, includes mounting bracket.
Solar Panel, Bracket, Mounting, 30W - 60W	10046890	Mounting bracket for 12V 30W to 60W solar panels.
Solar Panel, Bracket, Mounting, 5W - 20W	208	Mounting bracket for 12V 5W to 20W solar panels.
Sprocket, Drive, #40 Chain, 13 Tooth	40BS13	Drive sprocket, #40 Chain, 13 Tooth with Keyway, for 7251/7351.
Sprocket, Idler	40BB17H	Idler sprocket.
Sprocket, Limit, Quick Release	25B24	Quick release sprocket limit.
Sprocket, Quick Release	35B25	Quick release sprocket.
Switch and Bolt Kit, Magnetic	10456	Magnetic Proximity limit switch, with magnet and hardware. Use on operators without internal limits.
Transmitter, Remote, Era One, 2 Channel	ON2E/A	Era One remote transmitter, 2 channels, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, 4 Channels	ON4E/A	Era One remote transmitter, 4 channel, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, Bi-Directional Long Range, LoRa	ON3ELR/A	Era One bi-directional long range remote transmitter with LoRa technology, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel Black	INTI2/A	Inti remote transmitter, 2 channel, 433.92 MHz, black fascia.
Transmitter, Remote, Inti, 2 Channel Blue	INTI2B/A	Inti remote transmitter, 2 channel, 433.92 MHz, blue fascia.
Transmitter, Remote, Inti, 2 Channel Lilac	INTI2L/A	Inti remote transmitter, 2 channel, 433.92 MHz, lilac fascia.
Transmitter, Remote, Inti, 2 Channel Red	INTI2R/A	Inti remote transmitter, 2 channel, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel, Yellow	INTI2Y/A	Inti remote transmitter, 2 channel, 433.92 MHz, yellow fascia.

7251/7351 Parts and Accessories

Part Name	Part Number	Description
Transmitter-Receiver Kit, LoRa Technology	ONELRKIT/A	Includes 2 Era One bi-directional long range transmitters (ON3ELR/A), 1 OXI bi-directional receiver (OXILR/A), and 1 relay adapter (OX2UBP) to use with non-OXI port controllers.



PRO-SW4000XLS



Titan



Apollo



Vanguard 3501

Swing Gate Operators

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PRO-SW3000XLS PRO-SW4000XLS

Residential Single/Dual Swing Technology Gate Operators.

PRO-SW3000XLS for gates up to 16 ft and 650 lbs.

PRO-SW4000XLS for gates up to 20 ft and 1000 lbs.



Cost: Cost Effective Operation.



Solar: Solar Compatible.



Longer Life: Soft Start/Soft Stop.



Easy: Easy Programming.



Battery: Includes battery backup.



Gates: Works with All Types of Gates.



Design: Quick Installation.



Warranty: 2-Year Warranty.



Compliant: UL 325 Compliant.

PRO-SW3000XLS



PRO-SW4000XLS



Technical Specifications

Model	Type	Volts	Max. Gate Length	Max Gate Weight	Gate Speed
PRO-SW3000XLS	Single	12VDC	16'	650 lbs.	15-18 sec.
PRO-SW3200XLS	Second Arm	12VDC	16'	650 lbs.	15-18 sec.
PRO-SW4000XLS	Single	12VDC	20'	1000 lbs	18-20 sec
PRO-SW4200XLS	Second Arm	12VDC	20'	1000 lbs	18-20 sec

COMMON ELECTRICAL FEATURES

- 12VDC / 7.0 amp hour, sealed, rechargeable battery (included). Battery charge is maintained by a 120V AC/60 Hz input, 18V AC, 40 VA. output, transformer, regulated to 14V DC through control board
- Powered by a reliable 12 Volt (120 Watt) DC motor, 16:1 planetary gear drive system
- "Sleep draw" is 15 mA; "active draw" is 3 to 7 amps

COMMON ENGINEERING FEATURES

- The control board can be programmed for pull-to-open or push-to-open
- Operating temp: -5 F (-21C) to +160 F (71 C)
- Opening time: From 15 to 20 seconds
- Range of arm stroke: up to 16"(41 cm) with 3000XLS, and up to 21"(53 cm) with 4000XLS
- Operator length for 3000XLS: with arm fully retracted is 40.25" (102 cm)
- The PRO-SW3200XLS works as a second gate operator when combined with a PRO-SW3000XLS. The PRO-SW3200XLS includes a 40ft power cable.
- Operator length for 4000XLS: with arm fully retracted is 46.25" (117 cm)
- The PRO-SW4200XLS works as a second gate operator when combined with a PRO-SW4000XLS. The PRO-SW4200XLS includes a 50ft power cable
- Operation, diagnostic, and safety alarms
- Inherent obstruction sensing so the operator meets UL without external sensing devices
- Soft start/soft stop—for long mechanical life expectancy
- Auto close adjustable 3–120 seconds delay

PRO-SW3000XLS Models

Model	Part Number	Description	Weight (lbs)	Dimensions	Freight Class
PRO-SW3000XLS Single Gate Operator System	PRO-SW3000XLS	Includes: Primary arm with 6' cable, control box, battery, transformer, 1-button transmitter and receiver.	44	40"w x 18"d x 7"h	70
PRO-SW3200XLS Secondary Operator for dual gate use with PRO-SW3000XLS	PRO-SW3200XLS	Includes: Secondary arm with 40' cable.	31	45"w x 7"d x 9"h	70

PRO-SW4000XLS Models

Model	Part Number	Description	Weight (lbs)	Dimensions	Freight Class
PRO-SW4000XLS Single Gate Operator System	PRO-SW4000XLS	Includes: Primary arm with 6' cable, control box, battery, transformer, 1-button transmitter and receiver.	50	51"w x 18.5"d x 7.5"h	70
PRO-SW4200XLS Secondary Operator for dual gate use with PRO-SW4000XLS	PRO-SW4200XLS	Includes: Secondary arm with 40' cable.	31	48"w x 7"d x 7"h	70

PRO-SW3000XLS/PRO-SW3200XLS Parts and Accessories

Part Name	Part Number	Description
Battery, 7Ah	2500-1118	Single 7Ah replacement battery.
Bracket, Push to Open	R4388	Required for push to open installations; Order (2) brackets for dual swing installations. For use with PRO-SW3000XLS and PRO-SW3200XLS
Button, Unlit	RB101	Push button for open/close/stop operation of gate opener; up to 1000' with 16 gauge wire.
Cable, Power, 6'	R4887	6' power cable with strain relief for PRO-SW3000XLS and PRO-SW4000XLS.
Cable, Power, 40'	R4889	40' power cable with strain relief for PRO-SW3200XLS.
Control Box, Hinged, Complete	R5500	Complete, hinged control box for PRO-SW3000XLS and PRO-SW4000XLS.
Control Box, Hinged, Empty	R5501	Empty, hinged control box for PRO-SW3000XLS and PRO-SW4000XLS.

Supporters and Proud Members of



PRO-SW3000XLS/PRO-SW3200XLS Parts and Accessories

Part Name	Part Number	Description
Gooseneck, Pedestal	FM100	Aluminum mounting post for access control devices.
Harness, Battery	R5040	Battery harness for XLS models.
Intercom, Residential	F6100MBC	Residential intercom system with keypad and indoor base station.
Keypad, Wireless	F310	Wireless keypad with 25 code capacity; Powered by (3) AA batteries (not included).
Lock, Gate, Automatic	FM144	Electric gate lock for vehicular gates.
Lock, Pedestrian Gate	FM145	Lock secures pedestrian gates to post or column; includes keypad and push button.
Lock, Pin	FM345	Substitute front mount clevis pin with pin lock to prevent operator tampering and theft.
Mount, Front, Silver	R4886	Silver front mount for PRO-SW3000XLS.
PCB, Green, 3000/4000	R5211	PCB for 3000/4000 series operators with R5040 battery harness.
Photo Eyes, Through Beam	R4222	Through beam photo eye for non-contact entrapment protection.
Receiver, Universal	RB709U-NB	Receiver connects to any brand gate or garage door opener; up to 100' range.
Rev Counter, PCB Assembly, Magnetic	R4918	Magnetic rev counter PCB assembly for PRO-SW3000XLS and PRO-SW4000XLS.
Rev Counter, Wheel Assembly, Magnetic	R4880	Magnetic rev counter wheel assembly for PRO-SW3000XLS and PRO-SW4000XLS.
Sensor, Vehicle, Wireless	R4500	Wireless vehicle sensor to open gate; 100' range between transmitter and receiver.
Sensor, Vehicle, Wired	FM139	50' driveway vehicle sensor to open gate; Also available in 100' and 150'.
Solar Panel, 12V 10W	SOLAR10	12V 10W solar panel.
Transformer, 18V	RB570	Replacement transformer to maintain battery charge; 18V 2200mA.
Transmitter, Remote, Keychain, 1-button	RB741	1-button transmitter; For use with RB709U-NB universal receiver.
Transmitter, Remote, Keychain, 2-button	RB742	2-button transmitter; For use with RB709U-NB universal receiver.
Wire, Low Voltage	RB509-100	100' roll 16 gauge, stranded, dual conductor low voltage wire; UV treated, PVC coated.

PRO-SW4000XLS/PRO-SW4200XLS Parts and Accessories

Part Name	Part Number	Description
Battery, 7Ah	2500-1118	Single 7Ah replacement battery.
Bracket, Push to Open	R4KPTO	Required for push to open installations; Order (2) brackets for dual swing installations.
Button, Unlit	RB101	Push button for open/close/stop operation of gate opener; up to 1000' with 16 gauge wire.
Cable, Power	R4887	6' power cable with strain relief for PRO-SW3000XLS and PRO-SW4000XLS.
Control Box, Hinged, Complete	R5500	Complete, hinged control box for PRO-SW3000XLS and PRO-SW4000XLS.
Control Box, Hinged, Empty	R5501	Empty, hinged control box for PRO-SW3000XLS and PRO-SW4000XLS.
Gooseneck, Pedestal	FM100	Aluminum mounting post for access control devices.
Harness, Battery	R5040	Battery harness for XLS models.
Intercom, Residential	F6100MBC	Residential intercom system with keypad and indoor base station.
Keypad, Wireless	F310	Wireless keypad with 25 code capacity; Powered by (3) AA batteries (not included).
Lock, Gate, Automatic	FM144	Electric gate lock for vehicular gates.
Lock, Pedestrian Gate	FM145	Lock secures pedestrian gates to post or column; includes keypad and push button.
Lock, Pin	FM345	Substitute front mount clevis pin with pin lock to prevent operator tampering and theft.
PCB, Green, 3000/4000	R5211	PCB for 3000/4000 series operators with R5040 battery harness.
Photo Eyes, Through Beam	R4222	Through beam photo eye for non-contact entrapment protection.
Receiver, Universal	RB709U-NB	Receiver connects to any brand gate or garage door opener; up to 100' range.
Rev Counter, PCB Assembly, Magnetic	R4918	Magnetic rev counter PCB assembly for PRO-SW3000XLS and PRO-SW4000XLS.
Rev Counter, Wheel Assembly, Magnetic	R4880	Magnetic rev counter wheel assembly for PRO-SW3000XLS and PRO-SW4000XLS.

PRO-SW4000XLS/PRO-SW4200XLS Parts and Accessories

Part Name	Part Number	Description
Sensor, Vehicle, Wireless	R4500	Wireless vehicle sensor to open gate; 100' range between transmitter and receiver.
Sensor, Vehicle, Wired	FM139	50' driveway vehicle sensor to open gate; Also available in 100' and 150'.
Solar Panel, 12V 10W	SOLAR10	12V 10W solar panel.
Transformer, 18V	RB570	Replacement transformer to maintain battery charge; 18V 2200mA.
Transmitter, Remote, keychain, 1-button	RB741	1-button transmitter; For use with RB709U-NB universal receiver.
Transmitter, Remote, keychain, 2-button	RB742	2-button transmitter; For use with RB709U-NB universal receiver.
Wire, Low Voltage	RB509-100	100' roll 16 gauge, stranded, dual conductor low voltage wire; UV treated, PVC coated.

Apollo Linear Actuator

Trusted value, rugged performance. Easy to install, easy to operate direct drive gate opener.



Apollo 816 Linear Actuator



CBOX 310
Urban Residential, AC or Solar
for TITAN and Apollo LINEAR
Actuators



Weight and length limit: Move gates up to 600 lbs and 16 ft long.



Low maintenance: Easy to install and maintain.



Gate types: Single or dual gate applications.



Flexible: AC or Solar power options.



Adjustable: Independent, field-adjustable open and close speeds available on models with 1050 controller.



Performance: Durable components for operation in different weather conditions.



Technology: Nice BlueBUS 2-wire system self-identifies monitored photo eyes.



Resilient: Corrosion resistant, acme screw drive mechanism.



Made in USA: Designed, tested, and built within USA from globally sourced materials.



Technical Specifications

Model	Apollo 1500 LA System	Apollo 1551 LA System	Apollo Bundle MB1050 AC	Apollo Bundle 310 Solar	Apollo Bundle 310 AC
Operator Kit	Single: CBOX636 and 816-1 Dual: CBOX636, 816-1, and 816-2	Single: CBOX1050 and 816-1 Dual: CBOX1050, 816-1, and 816-2	Single: MB1050 and 816-1 Dual: MB1050, 816-1 and 816-2	Single: SolarBOX310 and 816-1 Dual: SolarBOX310, 816-1, and 816-2	Single: ACBOX310 and 816-1 Dual: ACBOX310, 816-1, and 816-2
Duty Cycle	Continuous for AC; Varies based on solar charging capacity*				
Drive	Electromechanical				
Open/Close Time	14 - 16 seconds. Dependent on gate	Open/Close speed set independently. Adjustable 14 - 16 seconds		14 - 16 seconds. Dependent on gate	
Gate Length Max.	up to 16 ft (5 m) leaf				
Gate Weight Max.	600 lb (272 kg)				
Temperature Rating	-4° to 122° F (-20° to 50° C)				
Operating Voltage	12VDC				
Input Voltage	12VDC	12VDC or 24VDC	115V or 208-230V 50/60Hz	12VDC	115VAC, 60Hz
Idle Current	15mA	17mA		10mA	
Accessory Power	(3) fused 12 volt outputs - each fused by a 3A fuse	12VDC and 24VDC 0.3A each location		Regulated 12V 500mA always on (2 locations); Regulated 12V 500mA standby off (2 locations)	
Included Accessories	318N receiver	OXIBD bi-directional receiver, one set of BlueBUS through beam photo eyes	OXIBD bi-directional receiver, Era One 2 Channel Mono Transmitter		
Communication	n/a	BlueBUS, BUST4, OXI		BlueBUS, USB, OXI	
User Controls	636US Control Board	1050US Controller		Mercury 310 Controller	
Relays	none	3 programmable relays		none	
Arm Dimensions	Total Length: 42.2 retracted - 66 extended inches (107.2 - 167.6 cm) Pin-to-Pin: 40.8 retracted - 64.6 extended inches (103.6 - 164 cm)				
Enclosure	CBOX: 18w x 18h x 8d inch (46w x 46h x 20.3d cm)		MBOX: 14.25w x 15.125h x 9d inch (36.2w x 38.4h x 22.9d cm)	CBOX: 18w x 18h x 8d inch (46w x 46h x 20.3d cm)	ACBOX: 11.8w x 15.8h x 6.7d inch (30w x 40h x 17 cm)
Control Box Finish	CBOX: Black powder coat steel		MBOX: Black Plastic	CBOX: Black powder coat steel	ACBOX: Grey Plastic
ETL Listed (UL 325)	n/a	Usage Class I, II			
Warranty	3 year w/product registration				

* Actual battery backed up cycles will depend on gate resistance to travel, cycle length, battery health, ambient temperature, accessory power draw and frequency of gate cycles during power outage.
Note: Battery and battery charger or solar panel required for operation, not included in all systems or bundles.

Apollo 816 linear actuator for farm and ranch swing gates. 12VDC battery powered, AC or Solar. Open up to 600 lb/16ft gate leaf in 14 to 16 seconds, dependent on gate. Adjustable force sensitivity for automatic safety reverse on all models.

Apollo Linear Actuator Models and Package Options

Model	Part Number	Description	Weight (lbs)	Dimensions	Freight Class
Apollo 816 LA	O-816	Linear Actuator, Primary Arm 816 Actuator with 12 ft harness, does not include mounting hardware.	25	40"w x 48"d x 51"h	70
Apollo 816-1 LA	O-816-1	Linear Actuator Complete, Primary Arm 816-1 Actuator 12 ft harness and mounting hardware.	35	40"w x 48"d x 51"h	70
Apollo 816X LA	O-816X	Linear Actuator, Secondary Arm 816X Actuator with 42 ft harness, does not include mounting hardware.	29	40"w x 48"d x 51"h	70
Apollo 816-2 LA	O-816-2	Linear Actuator Complete, Secondary Arm 816-2 Actuator kit with 42 ft harness and mounting hardware. Add to 1500 or 1551 for dual gate applications.	39	40"w x 48"d x 51"h	70
Apollo 1500 LA System	O-1500	Includes CBOX with 636 Controller, 816-1 arm and 318N receiver.	58	40"w x 48"d x 51"h	70
Apollo 1551 LA System	O-1551	Includes CBOX with 1050 Controller, 816-1 arm, OXI receiver and one set of BlueBUS through beam photo eyes.	58	40"w x 48"d x 51"h	70
Apollo Bundle MB1050 AC	O-AMB1050-AC-BL	Includes MBOX with 1050 controller, 816-1 arm, OXI receiver and ON2E transmitter. No charger required.	60	40"w x 48"d x 51"h	70
Apollo Bundle 310 Solar	O-A310-SLR-BL	Includes CBOX with Mercury 310 controller, 816-1 arm, OXI receiver and ON2E transmitter. Battery required but not included. No charger required.	58	40"w x 48"d x 51"h	70

Apollo Linear Actuator Models and Package Options

Model	Part Number	Description	Weight (lbs)	Dimensions	Freight Class
Apollo Bundle 310 AC	O-A310-AC-BL	Includes ACBOX with Mercury 310 controller, 816-1 arm, OXI receiver and ON2E transmitter. Includes (1) 8Ah battery and 250VA power supply. UL325 compliant.	60	40"w x 48"d x 51"h	70
Apollo Bundle 310	O-A310-BL	Includes CBOX with Mercury 310 controller, 816-1 arm, OXI receiver and ON2E transmitter. Battery required but not included. Solar panel, transformer and charger not included.	58	40"w x 48"d x 51"h	70

Apollo Linear Actuator Control Box Options

Model	Part Number	Description	Weight (lbs)	Dimensions	Freight Class
Nice CBOX636	O-CBOX636	636 Controller 11111B metal control box (18w x 18h x 8d inches) with 636 Controller. Includes 318N receiver.	23	18"w x 22"d x 10"h	70
Nice CBOX1050	O-CBOX1050	1050 Controller 11111B metal control box (18w x 18h x 8d inches) with 1050 controller board. Includes OXI receiver, UL 325 7th Edition Compliant.	23	18"w x 22"d x 10"h	70
Nice MB1050	O-MB1050	1050 control board MB1050 plastic AC control box (14.25w x 15.125h x 9d inches), includes 1050 controller, OXI receiver, ABF antenna kit, (2) 8Ah batteries and 320W power supply, UL325 7th Edition Compliant.	32	22"w x 11"d x 22"h	70
Nice CBOX310	O-CBOX310	Mercury 310 Controller SolarBOX black powder coated steel control box (18w x 18h x 8d inches) with Mercury 310 controller, OXI receiver, and ON2E transmitter.	23	18"w x 22"d x 100"h	70
Nice ACBOX310	O-ACBOX310	Mercury 310 controller ACBOX gunmetal grey plastic AC control box (12w x 18h x 8d inches) with Mercury 310 controller, OXI receiver, and ON2E transmitter. Includes (1) 8Ah battery.	23	19"w x 22"d x 10"h	70

Apollo Linear Actuator Parts and Accessories

Part Name	Part Number	Description
Adapter, OXI receiver to relay	OX2UBP	Universal adapter that converts any Nice receiver with the OXI form factor to work with any gate operator through a relay output. Works with 12-24V AC or DC input power.
Antenna, Directional, 433.92 MHz	ABF/A	Adjustable whip antenna with mounting bracket, removable terminal block and 10 ft coaxial cable for Nice 433.92 MHz receivers
Battery Charger, 1.5A	404C	Automatic battery charger/maintainer, 1.5A maximum output, requires 120VAC
Battery expansion Kit, ACBOX	MX5194	Kit to add additional 8Ah battery to ACBOX310. Includes 8Ah battery, battery shelf, wiring harness, and mounting hardware.
Battery, 8Ah	MX000909	Single 8Ah battery.
Bearing Kit	A2087	Bearing kit includes 3 thin race, 1 thick race and 2 bearings, plus key.
Box, Control, CBOX, No Controller	11111B	11111B metal control box, 18w x 18h x 8d, no controller, includes push button and key switch with 2 keys, and lid.
Box, Shipping, Actuator	A2034C	Actuator shipping box.
Bracket Retrofit Kit, Mercury 310	MX5196	Bracket kit to mount Mercury 310 into CBOX enclosure.
Bracket, Gate Attach Kit	10015290	Gate attach bracket kit for 816 or 912L actuators, includes hardware.
Bracket, Pivot, Bolt-On	446	Bolt-on pivot bracket for 816 or 912L actuators.
Bracket, Pivot, Kit, Single & Dual	10055490	Bracket kit, includes weld-on pivot bracket, gate attach bracket and hardware for all 416, 816 and 912L actuators.
Bracket, Retrofit Kit, for 1050 Controller	10055090	Retrofit brackets, for mounting the 1050 controller in 11111B control boxes.
Bumper, Rubber	3398	Rubber bump stop for gate.
Bushing, Back Housing	72510001	Back housing bushing.
Bushing, Gear Housing	72510003	Gear housing bushing.
Bushing, Limit Plate	A2052	Kimray bushing for limit plate.
Bushing, Top, Limit Switch	A2009	Top Limit Switch Bushing.
Buzzer, Piezo, 100dB	MX4711	Buzzer alarm for ACBOX.
Cable, 7 wire (per foot)	A2040	7 wire (per foot) cable.
Connector, Molex, White, 8 Pin	A2032	Includes connector and 8 wire terminals.
Controller, 636	636US	636 Controller, non-ETL, with limit bypass plug, for single or dual applications.
Controller, 1050	1050US	1050 Controller for single or dual applications, UL325 7th Edition Compliant.

Apollo Linear Actuator Parts and Accessories

Part Name	Part Number	Description
Controller, Mercury 310	MX4920	Mercury 310 controller for single or dual applications, UL325 7th Edition Compliant.
Conversion Kit, 416, 816 or 912L	400	Long gate conversion kit for 416, 816 or 912L actuators, increases maximum lead length to 20 ft.
Cover Tube, Seal Housing Kit	A2024K	Cover tube kit for 416 or 816 actuators, includes seal assembly.
Cover, Front, Gear, w/Bushing	A2046	Front cover housing kit for 416 or 816 actuators, includes bushing.
Detector, Probe, 12V	217	Exit probe kit, 12V, includes probe and controller.
Edge Channel, 10 ft	MX4219-03	Aluminum channel, mounts low and high profile edge sensors, 10 ft.
Edge Channel, 5 ft	MX4219-02	Aluminum channel, mounts low and high profile edge sensors, 5 ft.
Edge Sensor Assembly, Channel Mount, High Profile	AS1502-0440-05	High profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.75 inch (1.5 m, 25 x 45 mm).
Edge Sensor Assembly, Channel Mount, Low Profile	AS1502-0430-05	Low profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.25 inch (1.5 m, 25 x 30 mm).
Edge Sensor Assembly, Wraparound, Round	AS1501-0760	Round ASO wraparound edge sensor for use on 2 inch diameter pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).
Edge Sensor Assembly, Wraparound, Square	AS1501-0790	Square ASO wraparound edge sensor for use on 2 inch square pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).
Edge Sensor Roll, Channel Mount, High Profile, 82 ft	AS1502-0440	High profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.75 inch (25 m x 25 x 45 mm) Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
Edge Sensor Roll, Channel Mount, Low Profile, 82 ft	AS1502-0430	Low profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.25 inch (25 m x 25 x 30 mm). Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
End Cap, Edge, High Profile, 10k	AS1804-1630	Replacement end cap for high profile ASO edge sensor, with 10k resistive termination, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, No Resistor	AS1804-0490	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, Wire Leads	AS1804-0650	Replacement end cap for high profile ASO edge sensor, with wire leads, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, Low Profile, 10K	AS1804-1620	Replacement end cap for low profile ASO edge sensor, with 10k resistive termination, 1 x 1.25 inch (25 x 32 mm).
End Cap, Edge, Low Profile, No Resistor	AS1804-0480	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.25 inch (25 x 32 mm).
End Cap, Edge, Low Profile, Wire Leads	AS1804-0640	Replacement end cap for low profile ASO edge sensor, with wire leads, 1 x 1.25 inch (25 x 32 mm).

Apollo Linear Actuator Parts and Accessories

Part Name	Part Number	Description
Extension Tube, 816 or 416 actuators	A2027	Extension tube for 816 or 416 actuators.
Gear Nut, AC	A2006	AC gear nut.
Gear, Spur	A2017	Spur gear.
Gooseneck, stand, 69 in	MX5153	Pedestal, black powder coated 14-guage steel, 69 inch overall height.
Harness, 12 ft, 816	A2058	Replacement Cable Harness, 12 ft, for use with 816 Actuator and 1550 gate operator.
Harness, 42 ft, 816X	A2041	Replacement Cable Harness, 42 ft, for 816X actuators.
Hitch Pin w/Locking Pin	75980079	Hitch Pin with Locking Pin for 1500/1550/1551.
Housing, Rear, Kit	A2012	Rear housing kit, for 416 or 816 actuators. Includes limit cap and seal, strain relief.
Key Switch, Single Pole	1115	Single pole key switch for 11111B or 11111C control box, includes 2 keys.
Key, Shaft	A2039	Shaft key, 3/32 x 3/32 x 3/16.
Keypad, 100-code, wired	MX5150	Security Brands wired keypad with 100 code capacity.
Keypad, EDSWG, Wireless	EDSWG/A	Battery-powered wireless keypad.
Keypad, wireless, 433 MHz	MX5151	Security Brands wireless keypad and transceiver with 500 code capacity.
Limit Assembly Kit	A2088	Limit assembly kit.
Limit Block and Switch Assembly	A2074	Limit block and switch assembly.
Limit Block w/Magnet	A2002	Brass limit block with magnets for internal limit assemblies.
Limit Block, Plastic, No Switch	A2003P	No switch plastic limit block.
Limit Bolt, Proximity	A2005	Proximity limit bolt.
Limit Cap and Seal Kit	A2010	Limit Cap and Seal Kit for 816 actuator.
Limit Screw, 816 or 416 actuators	A2019	Limit screw for 816 or 416 actuators.
Limit Switch and Bracket Assembly	A2038	Full limit tower assembly, magnetic block and limit screw for 816 actuator.
Main Screw Kit	A2086	Main screw kit, includes limit screw, bushing/bearings and nut.
Main Screw, 816 or 416 Actuators	A2018	Main screw for 816 or 416 actuators.
Motor and Pinion Gear	A2014	Motor and pinion gear for 416 or 816 actuators.

Apollo Linear Actuator Parts and Accessories

Part Name	Part Number	Description
OVBT, Bluetooth Module	OVBT	Bluetooth connection module for Oview interface.
Photo Eye w/BlueBUS, Reflective, Adjustable, Large	EPMORB/A	Reflective photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in large size housing. Requires BlueBUS enabled controller. For use with Mercury 310/936/1050/XBA3/BCU1 and SmartCNX, SmartTouch 725 controllers.
Photo Eye w/BlueBUS, Through-Beam, Adjustable	EPMOB/A	Through-beam photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in medium size housing. Requires BlueBUS enabled controller. For use with the 936/1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable	EPMB/A	Through-beam photo eye with Nice BlueBUS communications technology and medium size housing. Requires BlueBUS enabled controller. For use with the 936/1050/XBA3/BCU1 and SmartCNX, SmartTouch 725 Controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable, Metal	EPMAB/A	Through-beam photo eye with Nice BlueBUS communications technology and solid, durable, medium size cast metal alloy housing. Requires BlueBUS enabled controller. For use with the 936/1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.
Plug, for Limit Bypass on 636US	71050014	Plug for limit bypass on 636US Controller.
Power Distribution Assembly, ACBOX	MX4860	Replacement power distribution assembly for use with ACBOX controller enclosure.
Programming unit for device BUS T4 connection	OVIEW/AR01	Unit for control, programming and diagnostics for devices equipped with BUST4 connection, for use with 1050 or XBA3 controllers Note: Firmware updates on 1050 and XBA3/U controllers require the OVIEW/A and the OVBT.
Proximity Compression Spring	A2008	Proximity compression spring.
Proximity Switch	A2004	Magnetic proximity limit switch for 416 or 816 actuators.
Receiver, 318M, Multi-Code	318M	Multi-Code receiver, single channel, 433.92 MHz, 63 code memory.
Receiver, 318N, 2 Channel	318N	Receiver, 2 channels, 433.92 MHz, 63 code memory.
Receiver, OXI, Long Range with LoRa Technology	OXILR/A	OXI bi-directional long range receiver, 433.92 MHz, 1024 codes with LoRa Technology, red fascia.
Receiver, OXIBD, Multi Channel	OXIBD/A	OXI bi-directional receiver, multiple channels, 433.92 MHz, 1000 code memory. Compatible with all ERA and INTI remotes and bi-directional remotes.
RTE Unit, wireless, button	MX5152	Remote exit button, for use with gooseneck stand on secure side of a gate.
Sensor, Smart	A2072	Smart speed sensor for 416 or 816 actuators.

Apollo Linear Actuator Parts and Accessories

Part Name	Part Number	Description
Signs, Moving Gate Warning, English	MX3193-01	Two UL 325 moving gate warning signs, English, 8.5 x 11 inch aluminum, includes 8 zip ties.
Solar Charge Regulator	SG-4	Solar charge regulator for 12V solar arrays up to 60W
Solar Panel, 12V 5W, w/ Mounting Bracket	201	Solar panel, 12V 5W, includes mounting bracket.
Solar Panel, 12V 10W, w/ Mounting Bracket	210	Solar panel, 12V 10W, includes mounting bracket.
Solar Panel, 12V 20W, w/ Mounting Bracket	212	Solar panel, 12V 20W, includes mounting bracket.
Solar Panel, Bracket, Mounting, 30W - 60W	10046890	Mounting bracket for 12V 30W to 60W solar panels.
Solar Panel, Bracket, Mounting, 5W - 20W	208	Mounting bracket for 12V 5W to 20W solar panels.
Switch, Push Button, Control Box	1119	Push button switch for 11111B or 11111C control box.
Tab, Replacement	10020915	Zinc plated replacement tab for 11111B, 11111C, CBOX.
Transformer, ACBOX	MX4859	Replacement AC transformer for use with ACBOX controller enclosure.
Transmitter, Remote, Era One, 2 Channel	ON2E/A	Era One remote transmitter, 2 channels, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, 4 Channels	ON4E/A	Era One remote transmitter, 4 channel, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, Bi-Directional Long Range, LoRa	ON3ELR/A	Era One bi-directional long range remote transmitter with LoRa technology, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel Black	INTI2/A	Inti remote transmitter, 2 channel, 433.92 MHz, black fascia.
Transmitter, Remote, Inti, 2 Channel Blue	INTI2B/A	Inti remote transmitter, 2 channel, 433.92 MHz, blue fascia.
Transmitter, Remote, Inti, 2 Channel Lilac	INTI2L/A	Inti remote transmitter, 2 channel, 433.92 MHz, lilac fascia.
Transmitter, Remote, Inti, 2 Channel Red	INTI2R/A	Inti remote transmitter, 2 channel, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel, Yellow	INTI2Y/A	Inti remote transmitter, 2 channel, 433.92 MHz, yellow fascia.
Transmitter-Receiver Kit, LoRa Technology	ONELRKIT/A	Includes 2 Era One bi-directional long range transmitters (ON3ELR/A), 1 OXI bi-directional receiver (OXILR/A), and 1 relay adapter (OX2UBP) to use with non-OXI port controllers.

TITAN Linear Actuator

Elegant, modular design. Quiet, powerful and field-repairable with multiple controller and power options.



TITAN 912 Linear Actuator



CBOX 310
Urban Residential, AC
or Solar for TITAN and
Apollo Linear Actuators



Simple: UL325 Type C compliance, with no external safety devices required using 310 bundle models*.



Powerful: Moves up to 600 lbs for a 20 ft gate leaf, or 1,000 lbs for an 8 ft gate leaf.



Easy maintenance: Modular, field replaceable components for easy maintenance.



Convenience: Easy access to limit switch adjustment.



Technology: Nice BlueBUS 2-wire system self-identifies monitored photo eyes.



Design: Superior arm design keeps out dust and snow.



Noise reduction: Soft-start and soft-stop for smooth gate operation.



Gate types: Single or dual gate applications.



Technical Specifications

Model	Nice TITAN12L1 LA System	Nice TITANKIT 12L1 AC	Nice TITANKIT 12L1 Solar	Nice TITANKIT 12L1 MB1050	Nice TITAN Bundle 310 AC	Nice TITAN Bundle 310 Solar
Operator Kit	Single: CBOX1050 and 912L-1 Dual: CBOX1050, 912L-1, and 912L-2. Carriage return rendered.		Single: CBOX1050 and 912L-1 Dual: CBOX1050, 912L-1 and 912L-2	Single: MB1050 and 912L-1; Dual: MB1050, 912L-1 and 912L-2	Single: ACBOX310 and 912L-1 Dual: ACBOX310, 912L-1, and 912L-2	Single: SolarBOX310 and 912L-1 Dual: SolarBOX310, 912L- 1, and 912L-2
Duty Cycle	Continuous for AC; Varies based on solar charging capacity*					
Drive	Electromechanical					
Open/Close Time	Open/Close speed set independently. Adjustable 14 - 16 seconds					
Gate Length Max.	Up to 20 ft gate leaf (6 m)					
Gate Weight Max.	Up to 600 lb for a 20 ft leaf (272 kg for 6 m); up to 1000 lb for a 8 ft leaf (453 kg for 2.4 m)					
Temperature Rating	-4° to 122° F (-20° to 50° C)					
Operating Voltage	12VDC					
Input Voltage	12VDC	12VDC or 24VDC	12VDC	115V or 208-230V 50/60Hz	115VAC, 60Hz	
Idle Current	17mA				10mA	
Accessory Power	12VDC and 24VDC 0.3A each location				Regulated 12V 500mA always on (2 locations); Regulated 12V 500mA standby off (2 locations)	
Included Accessories	OXIBD bi-directional receiver, one set of BlueBUS through beam photo eyes, Pivot Bolt	OXIBD bi-directional receiver, one set of BlueBUS reflective photo eyes, Era One 2 Channel Mono Transmitter, Pivot Bolt			OXIBD bi-directional receiver, Era One 2 Channel Mono Transmitter, Pivot Bolt	
Communication	BlueBUS, BUST4, OXI				BlueBUS, USB, OXI	
User Controls	1050US Controller				Mercury 310 Controller	
Relays	3 programmable				none	
Arm Dimensions	Total Length: 42.5 retracted - 69.3 extended inches (108 - 176 cm) Pin-to-Pin: 40.5 retracted - 67.3 extended inches (103 - 171 cm)					
Enclosure	CBOX: 18w x 18h x 8d inch (46w x 46h x 20.3d cm)			MB1050: 14.25w x 15.125h x 9d inch (36.2w x 38.4h x 22.9d cm)	ACBOX: 11.8w x 15.8h x 6.7d inch (30w x 40h x 17 cm)	CBOX: 18w x 18h x 8d inch (46w x 46h x 20.3d cm)
Control Box Finish	CBOX: Black powder coat steel			Black plastic	ACBOX: Grey Plastic	CBOX: Black powder coat steel
ETL Listed (UL 325)	Usage Class I, II					
Warranty	3 year w/product registration					

* Actual battery backed up cycles will depend on gate resistance to travel, cycle length, battery health, ambient temperature, accessory power draw and frequency of gate cycles during power outage.

TITAN 912 linear actuator for residential, farm and ranch swing gates. 12VDC battery powered, AC or Solar. Open up to 1000 lb/16ft gate leaf in 14 to 16 seconds, dependent on gate. Convenient access to limit switch adjustment, secured under locking cover plus keyed manual operation and modular design with simple field replaceable components.

TITAN Linear Actuator Models and Package Options

Model	Part Number	Description	Weight (lbs)	Dimensions	Freight Class
Nice 912L LA	O-912L	Linear Actuator, Primary Arm 912L actuator, 12V with encoder, 12 ft harness, does not include mounting hardware.	29	47"w x 9"d x 8"h	60
Nice 912L-1 LA	O-912L-1	Linear Actuator Complete, Primary Arm 912L-1 actuator kit, 12V with encoder, 12 ft harness and mounting hardware	39	47"w x 9"d x 8"h	60
Nice 912L-2 LA	O-912L-2	Linear Actuator Complete, Secondary Arm 912L-2 actuator kit, 12V with encoder, 42 ft harness and mounting hardware. Add to TITAN12L or TITAN12L1 for dual gate applications.	41	47"w x 9"d x 8"h	60
Nice 912LX LA	O-912LX	Linear Actuator, Secondary Arm 912LX actuator, 12V with encoder, 42 ft harness, does not include mounting hardware.	32	47"w x 9"d x 8"h	60
Nice TITAN12L1 LA System	O-TITAN12L1	Includes CBOX with 1050 controller, 912L-1 arm, OXI receiver and one set of BlueBUS through beam photo eyes.	62	40"w x 48"d x 51"h	70
Nice TITANKIT 12L1 AC	O-T12L1-AC-KIT	Kit includes 912L-1 arm, CBOX with 1050 controller, battery charger, OXI receiver, ON2E transmitter, ABF antenna, and BlueBUS reflective photo eye.	70	46"w x 30"d x 10"h	60
Nice TITANKIT 12L1 Solar	O-T12L1-SLR-KIT	Kit includes 912L-1 arm, CBOX with 1050 controller, solar panel, OXI receiver, ON2E transmitter, ABF antenna, and BlueBUS reflective photo eye.	71	46"w x 30"d x 10"h	60
Nice TITANKIT 12L1 MB1050	O-T12L1MB-AC-KIT	Kit includes 912L-1 arm, MBOX (Black plastic control box kit, 14.25w x 15.125h x 9d inch) with 1050 controller, battery, OXI receiver, ON2E transmitter, ABF antenna, and BlueBUS reflective photo eye. No charger required.	72	46"w x 30"d x 10"h	60

TITAN Linear Actuator Models and Package Options

Model	Part Number	Description	Weight (lbs)	Dimensions	Freight Class
Nice TITAN Bundle 310 AC	O-T310-AC-BL	Kit includes 912L-1 arm, ACBOX (Gunmetal grey plastic control box kit with Mercury 310 controller, battery), OXI receiver and ON2E. No charger required.	72	46"w x 30"d x 10"h	70
Nice TITAN Bundle 310 Solar	O-T310-SLR-BL	Includes CBOX with Mercury 310 controller, 912L-1 arm, OXI receiver and ON2E transmitter. Battery required but not included. Charger not required.	70	46"w x 30"d x 10"h	70
Nice TITAN Bundle 310	O-T310-BL	Includes CBOX with Mercury 310 controller, 912L-1 arm, OXI receiver and ON2E transmitter. Battery required but not included. Solar panel, transformer and charger not included.	70	46"w x 30"d x 10"h	70

TITAN Linear Actuator Control Box Options

Model	Part Number	Description	Weight (lbs)	Dimensions	Freight Class
Nice CBOX1050	O-CBOX1050	1050 Controller 11111B metal control box (18w x 18h x 8d inches) with 1050 controller board. Includes OXI receiver, UL 325 7th Edition Compliant.	23	18"w x 22"d x 10"h	70
Nice CBOX310	O-CBOX310	Mercury 310 Controller SolarBOX black powder coated steel control box (18w x 18h x 8d inches) with Mercury 310 controller, OXI receiver, and ON2E transmitter.	23	18"w x 22"d x 10"h	70
Nice ACBOX310	O-ACBOX310	Mercury 310 controller ACBOX gunmetal grey plastic AC control box (12w x 18h x 8d inches) with Mercury 310 controller, OXI receiver, and ON2E transmitter.	23	19"w x 22"d x 10"h	70
Nice MB1050	O-MB1050	1050 Controller MB1050 plastic AC control box (14.25w x 15.125h x 9d inches), includes 1050 controller, OXI receiver, ABF antenna kit, (2) 8Ah batteries and 320W power supply, UL325 7th Edition Compliant.	32	70 22"w x 11"d x 22"h	70

TITAN Linear Actuator Parts and Accessories

Part Name	Part Number	Description
Adapter, OXI receiver to relay	OX2UBP	Universal adapter that converts any Nice receiver with the OXI form factor to work with any gate operator through a relay output. Works with 12-24V AC or DC input power.
Antenna, Directional, 433.92 MHz	ABF/A	Adjustable whip antenna with mounting bracket, removable terminal block and 10 ft coaxial cable for Nice 433.92 MHz receivers.
Battery Charger, 1.5A	404C	Automatic battery charger/maintainer, 1.5A maximum output, requires 120VAC
Battery, Expansion Kit, ACBOX	MX5194	Kit to add additional 8Ah battery to ACBOX310. Includes 8Ah battery, battery shelf, wiring harness, and mounting hardware.
Battery, 8Ah	MX000909	Single 8Ah battery.
Bolt, Pivot, Kit	MX4681	Accessory kit for Pivot Bolt. Includes Pivot Bolt, washer, threaded hex nut, cotter pin. Compatible with all 912L actuators.
Box, Control, CBOX, No Controller	11111B	11111B metal control box, 18w x 18h x 8d, no controller, includes push button and key switch with 2 keys, and lid.
Bracket Retrofit Kit, Mercury 310	MX5196	Bracket kit to mount Mercury 310 into CBOX enclosure.
Bracket, Gate Attach Kit	10015290	Gate attach bracket kit for 816 or 912L actuators, includes hardware.
Bracket, Pivot, Bolt-On	446	Bolt-on pivot bracket for 816 or 912L actuators.
Bracket, Pivot, Kit, Single & Dual	10055490	Bracket kit, includes weld-on pivot bracket, gate attach bracket and hardware for all 416, 816 and 912L actuators.
Bracket, Retrofit Kit, for 1050 Controller	10055090	Retrofit brackets, for mounting the 1050 controller in 11111B control boxes.
Bumper, Rubber	3398	Rubber bump stop for gate.
Buzzer, Piezo, 100dB	MX4711	Buzzer alarm for ACBOX.
Cable, 7 wire (per foot)	A2040	7 wire cable (sold per foot)
Controller, 1050	1050US	1050 Controller for single or dual applications, UL325 7th Edition Compliant.
Controller, Mercury 310	MX4920	Mercury 310 controller for single or dual applications, UL325 7th Edition Compliant.
Conversion Kit, 416, 816 or 912L	400	Long gate conversion kit for 416, 816 or 912L actuators, increases maximum lead length to 20 ft.
Cover, Motor, Bottom	PD0929A3000	Bottom motor cover for TITAN12L/12L1, aluminum.
Cover, Upper	PD0942A3000	Upper cover for TITAN12L/12L1, aluminum.
Detector, Probe, 12V	217	Exit probe kit, 12V, includes probe and controller.

TITAN Linear Actuator Parts and Accessories

Part Name	Part Number	Description
Edge Channel, 10 ft	MX4219-03	Aluminum channel, mounts low and high profile edge sensors, 10 ft.
Edge Channel, 5 ft	MX4219-02	Aluminum channel, mounts low and high profile edge sensors, 5 ft.
Edge Sensor Assembly, Channel Mount, High Profile	AS1502-0440-05	High profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.75 inch (1.5 m, 25 x 45 mm).
Edge Sensor Assembly, Channel Mount, Low Profile	AS1502-0430-05	Low profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.25 inch (1.5 m, 25 x 30 mm).
Edge Sensor Assembly, Wraparound, Round	AS1501-0760	Round ASO wraparound edge sensor for use on 2 inch diameter pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).
Edge Sensor Assembly, Wraparound, Square	AS1501-0790	Square ASO wraparound edge sensor for use on 2 inch square pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).
Edge Sensor Roll, Channel Mount, High Profile, 82 ft	AS1502-0440	High profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.75 inch (25 m x 25 x 45 mm) Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
Edge Sensor Roll, Channel Mount, Low Profile, 82 ft	AS1502-0430	Low profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.25 inch (25 m x 25 x 30 mm). Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
End Cap, Edge, High Profile, 10k	AS1804-1630	Replacement end cap for high profile ASO edge sensor, with 10k resistive termination, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, No Resistor	AS1804-0490	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, Wire Leads	AS1804-0650	Replacement end cap for high profile ASO edge sensor, with wire leads, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, Low Profile, 10K	AS1804-1620	Replacement end cap for low profile ASO edge sensor, with 10k resistive termination, 1 x 1.25 inch (25 x 32 mm).
End Cap, Edge, Low Profile, No Resistor	AS1804-0480	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.25 inch (25 x 32 mm)
End Cap, Edge, Low Profile, Wire Leads	AS1804-0640	Replacement end cap for low profile ASO edge sensor, with wire leads, 1 x 1.25 inch (25 x 32 mm).
Gooseneck, Stand, 69 in	MX5153	Pedestal, black powder coated 14-guage steel, 69 inch overall height.

TITAN Linear Actuator Parts and Accessories

Part Name	Part Number	Description
Harness, 7 wire, 12 ft, no connector	A2094	Harness, 7 wire, 12' overall length, no connector, for motors used with 1050 series and Mercury 310 controller.
Harness, 7 wire, 42 ft, no connector	A2095	Harness, 7 wire, 42' overall length, no connector, for motors used with 1050 series and Mercury 310 controller.
Key Switch, Single Pole	1115	Single pole key switch for 11111B or 11111C control box, includes 2 keys.
Keypad, 100-code, wired	MX5150	Security Brands wired keypad with 100 code capacity.
Keypad, EDSWG, Wireless	EDSWG/A	Battery-powered wireless keypad.
Keypad, wireless, 433 MHz	MX5151	Security Brands wireless keypad and transceiver with 500 code capacity.
Keys, Spare	NTK1010	Set of 2 spare keys for TITAN12L/12L1 and Nice 4000/8000 series cover locks.
Limit Switch	SPSWLSM-01	Limit switch for TITAN12L/12L1.
Motor, Electric, 12V	SPSW912-01	Electric motor only, TITAN12L/12L1, 12V.
OVBT, Bluetooth Module	OVBT	Bluetooth connection module for Oview interface.
Photo Eye w/BlueBUS, Reflective, Adjustable, Large	EPMORB/A	Reflective photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in large size housing. Requires BlueBUS enabled controller. For use with Mercury 310/1050/XBA3/BCU1 and SmartCNX, SmartTouch 725 controllers.
Photo Eye w/BlueBUS, Through-Beam, Adjustable	EPMOB/A	Through-beam photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in medium size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.
Photo Eye w/BlueBUS, Through-Beam, Adjustable, Large	EPLOB/A	Through-beam photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in large size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1 and SmartCNX, SmartTouch 725 Controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable	EPMB/A	Through-beam photo eye with Nice BlueBUS communications technology and medium size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1 and SmartCNX, SmartTouch 725 Controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable, Metal	EPMAB/A	Through-beam photo eye with Nice BlueBUS communications technology and solid, durable, medium size cast metal alloy housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.
Power Distribution Assembly, ACBOX	MX4860	Replacement power distribution assembly for use with ACBOX controller enclosure.

TITAN Linear Actuator Parts and Accessories

Part Name	Part Number	Description
Programming unit for device BUS T4 connection	OVIEW/AR01	Unit for control, programming and diagnostics for devices equipped with BUST4 connection, for use with 1050 or XBA3 controllers Note: Firmware updates on 1050 and XBA3/U controllers require the OVIEW/A and the OVBT.
Receiver, 318N, 2 Channel	318N	Receiver, 2 channels, 433.92 MHz, 63 code memory.
Receiver, OXI, Long Range with LoRa Technology	OXILR/A	OXI bi-directional long range receiver, 433.92 MHz, 1024 codes with LoRa Technology, red fascia.
Receiver, OXIBD, Multi Channel	OXIBD/A	OXI bi-directional receiver, multiple channels, 433.92 MHz, 1000 code memory. Compatible with all ERA and INTI remotes and bi-directional remotes.
RTE Unit, wireless, button	MX5152	Remote exit button, for use with gooseneck stand on secure side of a gate.
Seal and Housing, 912L	SPTTN03	Seal, housing and guide.
Signs, Moving Gate Warning, English	MX3193-01	Two UL 325 moving gate warning signs, English, 8.5 x 11 inch aluminum, includes 8 zip ties.
Solar Charge Regulator	SG-4	Solar charge regulator for 12V solar arrays up to 60W.
Solar Panel, 12V 5W, w/Mounting Bracket	201	Solar panel, 12V 5W, includes mounting bracket.
Solar Panel, 12V 10W, w/Mounting Bracket	210	Solar panel, 12V 10W, includes mounting bracket.
Solar Panel, 12V 20W, w/Mounting Bracket	212	Solar panel, 12V 20W, includes mounting bracket.
Solar Panel, Bracket, Mounting, 30W - 60W	10046890	Mounting bracket for 12V 30W to 60W solar panels.
Solar Panel, Bracket, Mounting, 5W - 20W	208	Mounting bracket for 12V 5W to 20W solar panels.
Switch, Push Button, Control Box	1119	Push button switch for 11111B or 11111C control box.
Tab, Replacement	10020915	Zinc plated replacement tab for 11111B, 11111C, CBOX.
Transformer, ACBOX	MX4859	Replacement AC transformer for use with ACBOX controller enclosure.
Transmitter, Remote, Era One, 2 Channel	ON2E/A	Era One remote transmitter, 2 channels, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, 4 Channels	ON4E/A	Era One remote transmitter, 4 channel, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, Bi-Directional Long Range, LoRa	ON3ELR/A	Era One bi-directional long range remote transmitter with LoRa technology, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel Black	INTI2/A	Inti remote transmitter, 2 channel, 433.92 MHz, black fascia.

TITAN Linear Actuator Parts and Accessories

Part Name	Part Number	Description
Transmitter, Remote, Inti, 2 Channel Blue	INTI2B/A	Inti remote transmitter, 2 channel, 433.92 MHz, blue fascia.
Transmitter, Remote, Inti, 2 Channel Lilac	INTI2L/A	Inti remote transmitter, 2 channel, 433.92 MHz, lilac fascia.
Transmitter, Remote, Inti, 2 Channel Red	INTI2R/A	Inti remote transmitter, 2 channel, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel, Yellow	INTI2Y/A	Inti remote transmitter, 2 channel, 433.92 MHz, yellow fascia
Transmitter-Receiver Kit, LoRa Technology	ONELRKIT/A	Includes 2 Era One bi-directional long range transmitters (ON3ELR/A), 1 OXI bi-directional receiver (OXILR/A), and 1 relay adapter (OX2UBP) to use with non-OXI port controllers.
Tube, Assembly, 912L	SPAMG206A00	912L rod assembly, includes cover tube and extension tube for TITAN12L/12L1.

Vanguard 3501 Swing

See the gate, not the opener. Articulating arm and post-mount design blends seamlessly and elegantly with the gate for quiet operation.



Powerful: Moves up to a 1,000 lbs and 20 ft gate leaf.



Low maintenance: Easy to install and maintain.



Durable: Newly redesigned corrosion resistant cover and long-lasting components.



Quiet: Smooth, low-friction motor ensures near-noiseless operation.



Safe: Offset pivot arm reduces the possibility of pinching.



Flexible: AC or Solar power options.



Technology: Nice BlueBUS 2-wire system self-identifies monitored photo eyes.



Design: Low profile, post mount design allows for compact installation.



Made in USA: Designed, tested, and built within USA from globally sourced materials.

Vanguard 3501 articulating arm for residential, farm and ranch swing gates. 12VDC battery powered, AC or Solar. Open up to 1000 lb/20 ft gate leaf in approximately 20 seconds. Model operates with Mercury 310 controller. Operator includes chassis, articulating arm and CBOX with Mercury 310 controller, plus OXI receiver and (1) ONE2E transmitter.

Note: Battery and battery charger or solar panel required for operation, not included.



Technical Specifications

Model	Vanguard 310 Swing
Operator Kit	Single: CBOX310 control box, CH35-1 drive chassis, ABOX35 arm kit Twin: CBOX310 control box, CH35-1 and CH35-2 drive chassis, two ABOX35 arm kits
Duty Cycle	Varies based on charging capacity*
Drive	Electromechanical
Gate Length Max.	up to 20 ft leaf (6 m)
Gate Weight Max.	up to 1,000 lb leaf (272 kg)
Open/Close Time (to 90°)	~20 seconds
Temperature Rating	-4° to 122° F (-20° to 50° C)
Operating Voltage	12VDC
Input Voltage	18VDC to 24VDC
Idle Current	<10mA
Accessory Power	12V 500mA always on (2 locations) 12V 500mA standby off (2 locations)
Included Accessories	OXIBD bi-directional receiver, one set of BlueBUS reflective photo eyes
Communication	BlueBUS, USB port, OXI, 433MHz remote
User Controls	Mercury 310 board
Relays	N/A
Arm Dimensions	ABOX35: Primary: 36 inches total length; Secondary: 38.5 inches total length
Enclosure	CBOX: 18w x 18h x 8d inch (45.7w x 45.7h x 20.3d cm) Chassis: 17.8w x 12h x 8.3d inch (45.2w x 30.5h x 21d cm)
Finish	Powder coated steel chassis; molded polyethylene cover
ETL Listed (UL 325)	Usage Class I, II
Warranty	3 year w/product registration

*If the operator is AC powered, the battery, if present, (not included or required) will be a backup for when AC power is lost.
If the operator is solar powered, battery and 12V solar panel are required (not included).
The Mercury 310 control board is equipped with an internal battery charger.

Vanguard 3501 Swing Models

Model	Part Number	Description	Weight (lbs)	Dimensions	Freight Class
Apollo 35-1	O-35-1	Chassis and arm, primary operator. Chassis kit includes CHBOX35 chassis, ABOX35 arm and 12 ft harness for Vanguard 3501 Swing.	74	19"w x 17"d x 10"h	60
Apollo 35-2	O-35-2	Chassis and arm, secondary operator. Chassis kit includes CHBOX35 chassis, ABOX35 arm and 42 ft harness, add to Vanguard 3501 Swing for dual gate applications.	78	19"w x 17"d x 10"h	60
Apollo 3501 Swing	O-3501	Operator includes articulating arm and CBOX with Mercury 310 Controller, plus OXI receiver, ONE2E transmitter.	118	40"w x 48"d x 32"h	60

Vanguard 3501 Swing Parts and Accessories

Part Name	Part Number	Description
Adapter, OXI receiver to relay	OX2UBP	Universal adapter that converts any Nice receiver with the OXI form factor to work with any gate operator through a relay output. Works with 12-24V AC or DC input power.
Antenna, Directional, 433.92 MHz	ABF/A	Adjustable whip antenna with mounting bracket, removable terminal block and 10 ft coaxial cable for Nice 433. 92 MHz receivers.
Arm Adjuster, Vanguard 3501	10021790	Arm adjuster for Vanguard 3501.
Arm Assembly, Vanguard 3501	ABOX35	Arm assembly for Vanguard 3501.
Battery Charger, 1.5A	404C	Automatic battery charger/maintainer, 1.5A maximum output, requires 120VAC.
Bearing, Flange, 4-bolt, 1 1/4	72510000	Crankshaft bearing, 1.25 inch shaft, 4 bolt flange, StrongArm (HTG 320). Also used in Vanguard 3501.
Box, Control, CBOX, No Controller	11111B	11111B metal control box, 18w x 18h x 8d, no controller, includes push button and key switch with 2 keys, and lid.
Bracket Retrofit Kit, Mercury 310	MX5196	Bracket kit to mount Mercury 310 into CBOX enclosure.
Bracket, Gate Attach Kit, 3501	10021290	Gate attach bracket kit for ABOX35, includes hardware.
Bracket, Post Mount	10038315	Post mount plate bracket for 3501.
Bracket, Retrofit Kit, for 1050 Controller	10055090	Retrofit brackets, for mounting the 1050 controller in 11111B control boxes.
Brush Set	71020045	Brush set (Telco), 2 brushes for 3501.
Bumper, Rubber	3398	Rubber bump stop for gate.
Cable, 7 wire (per foot)	A2040	7 wire (per foot) cable.
Chain, #50, 13 Pitches, w/Master Link	MX5622	Chain #50, 13 Pitches, with master link.
Collar and Magnet	10021490	Limit collar and magnet assembly for 3501.
Collar, Insert, Primary Arm	10045790	Primary Arm Collar Insert.
Controller, Mercury 310	MX4920	Mercury 310 Controller for single or dual applications, UL325 7th Edition Compliant.
Cover, Plastic, New	MX4774	Black plastic cover, replacement for Vanguard 3501 Swing operator chassis.
Cover, Vanguard 3501, Retro-Fit Kit	MX4805	Includes everything you need to retrofit existing Vanguard 3501 installed units to a great new, modern look.
Detector, Probe, 12V	217	Exit probe kit, 12V, includes probe and controller.

Vanguard 3501 Swing Parts and Accessories

Part Name	Part Number	Description
Edge Channel, 10 ft	MX4219-03	Aluminum channel, mounts low and high profile edge sensors, 10 ft.
Edge Channel, 5 ft	MX4219-02	Aluminum channel, mounts low and high profile edge sensors, 5 ft.
Edge Sensor Assembly, Channel Mount, High Profile	AS1502-0440-05	High profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.75 inch (1.5 m, 25 x 45 mm).
Edge Sensor Assembly, Channel Mount, Low Profile	AS1502-0430-05	Low profile channel mount ASO edge sensor, preassembled with end caps and aluminum mounting channel, 5 ft, 1 x 1.25 inch (1.5 m, 25 x 30 mm).
Edge Sensor Assembly, Wraparound, Round	AS1501-0760	Round ASO wraparound edge sensor for use on 2 inch diameter pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).
Edge Sensor Assembly, Wraparound, Square	AS1501-0790	Square ASO wraparound edge sensor for use on 2 inch square pole. Three contact surfaces for sensing contact in any direction. 5 ft x 2 inch (1.5 m x 51 mm).
Edge Sensor Roll, Channel Mount, High Profile, 82 ft	AS1502-0440	High profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.75 inch (25 m x 25 x 45 mm) Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
Edge Sensor Roll, Channel Mount, Low Profile, 82 ft	AS1502-0430	Low profile channel mount ASO edge sensor, 82 ft roll x 1 x 1.25 inch (25 m x 25 x 30 mm). Used to create custom length edge sensors. Purchase channel and two end cap types to complete system.
End Cap, Edge, High Profile, 10k	AS1804-1630	Replacement end cap for high profile ASO edge sensor, with 10k resistive termination, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, No Resistor	AS1804-0490	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, High Profile, Wire Leads	AS1804-0650	Replacement end cap for high profile ASO edge sensor, with wire leads, 1 x 1.75 inch (25 x 44 mm).
End Cap, Edge, Low Profile, 10K	AS1804-1620	Replacement end cap for low profile ASO edge sensor, with 10k resistive termination, 1 x 1.25 inch (25 x 32 mm).
End Cap, Edge, Low Profile, No Resistor	AS1804-0480	Replacement end cap for ASO edge sensor without resistive termination to make a non-monitored edge to function with pre-2016 operators, 1 x 1.25 inch (25 x 32 mm).
End Cap, Edge, Low Profile, Wire Leads	AS1804-0640	Replacement end cap for low profile ASO edge sensor, with wire leads, 1 x 1.25 inch (25 x 32 mm).
Gearmotor Assembly, Vanguard 3501	MX5240	Gearmotor assembly for Vanguard 3501.
Gooseneck, Stand, 69 in	MX5153	Pedestal, black powder coated 14-guage steel, 69 inch overall height.

Vanguard 3501 Swing Parts and Accessories

Part Name	Part Number	Description
Harness, 7 wire, 12 ft, no connector	A2094	Harness, 7 wire, 12' overall length, no connector, for motors used with 936 or 1050 series and Mercury 310 controller.
Harness, 7 wire, 42 ft, no connector	A2095	Harness, 7 wire, 42' overall length, no connector, for motors used with 936 or 1050 series and Mercury 310 controller.
Key Switch, Single Pole	1115	Single pole key switch for 11111B or 11111C control box, includes 2 keys.
Keypad, 100-code, wired	MX5150	Security Brands wired keypad with 100 code capacity.
Keypad, EDSWG, Wireless	EDSWG/A	Battery-powered wireless keypad.
Keypad, Wireless, 433 MHz	MX5151	Security Brands wireless keypad and transceiver with 500 code capacity.
Limit Block	10024190	Limit switch block, with limit switches, for 3501.
Limit, Sub Assembly, 3501	10058890	Limit assembly, includes bracket, limit switch block, terminal block, for 3501 operator.
OVBt, Bluetooth Module	OVBt	Bluetooth connection module for Oview interface.
Photo Eye w/BlueBUS, Reflective, Adjustable, Large	EPMORB/A	Reflective photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in large size housing. Requires BlueBUS enabled controller. For use with Mercury 310/1050/XBA3/BCU1 and SmartCNX, SmartTouch 725 controllers.
Photo Eye w/BlueBUS, Through-Beam, Adjustable	EPMOB/A	Through-beam photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in medium size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.
Photo Eye w/BlueBUS, Through-Beam, Adjustable, Large	EPLOB/A	Through-beam photo eye with Nice BlueBUS communications technology. Adjustable optics are positionable to 30° in large size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1 and SmartCNX, SmartTouch 725 Controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable	EPMB/A	Through-beam photo eye with Nice BlueBUS communications technology and medium size housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1 and SmartCNX, SmartTouch 725 Controllers.
Photo Eye w/BlueBUS, Through-Beam, Non-Adjustable, Metal	EPMAb/A	Through-beam photo eye with Nice BlueBUS communications technology and solid, durable, medium size cast metal alloy housing. Requires BlueBUS enabled controller. For use with the 1050/XBA3/BCU1/SmartCNX, SmartTouch 725 and Mercury 310 controllers.

Vanguard 3501 Swing Parts and Accessories

Part Name	Part Number	Description
Programming unit for device BUS T4 connection	OVIEW/AR01	Unit for control, programming and diagnostics for devices equipped with BUST4 connection, for use with 1050 or XBA3 controllers Note: Firmware updates on 1050 and XBA3/U controllers require the OVIEW/A and the OVBt.
Receiver, OXI, Long Range with LoRa Technology	OXILR/A	OXI bi-directional long range receiver, 433.92 MHz, 1024 codes with LoRa Technology, red fascia.
Receiver, OXIBD, Multi Channel	OXIBD/A	OXI bi-directional receiver, multiple channels, 433.92 MHz, 1000 code memory. Compatible with all ERA and INTI remotes and bi-directional remotes.
RTE Unit, Wireless, Button	MX5152	Remote exit button, for use with gooseneck stand on secure side of a gate.
Signs, Moving Gate Warning, English	MX3193-01	Two UL 325 moving gate warning signs, English, 8.5 x 11 inch aluminum, includes 8 zip ties.
Solar Charge Regulator	SG-4	Solar charge regulator for 12V solar arrays up to 60W.
Solar Panel, 12V 5W, w/Mounting Bracket	201	Solar panel, 12V 5W, includes mounting bracket.
Solar Panel, 12V 10W, w/Mounting Bracket	210	Solar panel, 12V 10W, includes mounting bracket.
Solar Panel, 12V 20W, w/Mounting Bracket	212	Solar panel, 12V 20W, includes mounting bracket.
Solar Panel, Bracket, Mounting, 30W - 60W	10046890	Mounting bracket for 12V 30W to 60W solar panels.
Solar Panel, Bracket, Mounting, 5W - 20W	208	Mounting bracket for 12V 5W to 20W solar panels.
Switch, Push Button, Control Box	1119	Push button switch for 11111B or 11111C control box.
Tab, Replacement	10020915	Zinc plated replacement tab for 11111B, 11111C, CBOX.
Toggle Switch Assembly, Vanguard 3501	10024290	Toggle switch assembly for Vanguard 3501.
Torque Limiter, Vanguard 3501	10040690	Torque Limiter for Vanguard 3501.
Transmitter, Remote, Era One, 2 Channel	ON2E/A	Era One remote transmitter, 2 channels, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, 4 Channels	ON4E/A	Era One remote transmitter, 4 channel, 433.92 MHz, black fascia.
Transmitter, Remote, Era One, Bi-Directional Long Range, LoRa	ON3ELR/A	Era One bi-directional long range remote transmitter with LoRa technology, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel Black	INTI2/A	Inti remote transmitter, 2 channel, 433.92 MHz, black fascia.
Transmitter, Remote, Inti, 2 Channel Blue	INTI2B/A	Inti remote transmitter, 2 channel, 433.92 MHz, blue fascia.

Vanguard 3501 Swing Parts and Accessories

Part Name	Part Number	Description
Transmitter, Remote, Inti, 2 Channel Lilac	INTI2L/A	Inti remote transmitter, 2 channel, 433.92 MHz, lilac fascia.
Transmitter, Remote, Inti, 2 Channel Red	INTI2R/A	Inti remote transmitter, 2 channel, 433.92 MHz, red fascia.
Transmitter, Remote, Inti, 2 Channel, Yellow	INTI2Y/A	Inti remote transmitter, 2 channel, 433.92 MHz, yellow fascia.
Transmitter-Receiver Kit, LoRa Technology	ONELRKIT/A	Includes 2 Era One bi-directional long range transmitters (ON3ELR/A), 1 OXI bi-directional receiver (OXILR/A), and 1 relay adapter (OX2UBP) to use with non-OXI port controllers.

Parts and accessories for slide and swing gate operators

Just a few of the many accessories available. See operator parts section for more.



THRU BEAM

Photo Eye Kit
Part Number: EPMOB/A



WIRELESS KEYPAD

Part Number: EDSWG/A



OVIEW PROGRAMMING UNIT

Part Number: OVIEW/AR01



INTI 2-CHANNEL TRANSMITTER

(other colors available)
Part Number: INTI2B/A



ERA ONE 2 OR 4 CHANNEL TRANSMITTERS

(4 channel shown)
Part Number: ON4E/A



LORA TRANSMITTER/RECEIVER KIT

Part Number: ONELRKIT/A



BATTERY CHARGER

Part Number: 404C



ASO EDGE SENSORS

Part Number: Multiple (please see
table (link to page) for options)



OXI BI-DIRECTIONAL RECEIVER

Part Number: OXIBD/Aw



12V 10W SOLAR PANEL

(20W, 30W and 40W also available)
Part Number: 210

Parts and accessories for slide and swing gate operators



UNIVERSAL AND MULTI-CHANNEL RECEIVERS

Choose either the OXI multi-channel or 318N universal receiver. Both offer a unique receiver output that can be associated to each transmitter key. The OXI receiver can receive and memorize up to 1000 codes/transmitters and be customized through board programming to perform several different functions.



GIVE YOURSELF AN *EDGE*

These highly engineered, simple and rugged ASO edge sensors give installers and their customers peace of mind. They're incredibly easy to install, withstand typical rough shipment and installation handling, don't short due to water absorption, and they keep performing under the most severe climate and site conditions.



2 AND 4-CHANNEL REMOTE TRANSMITTERS

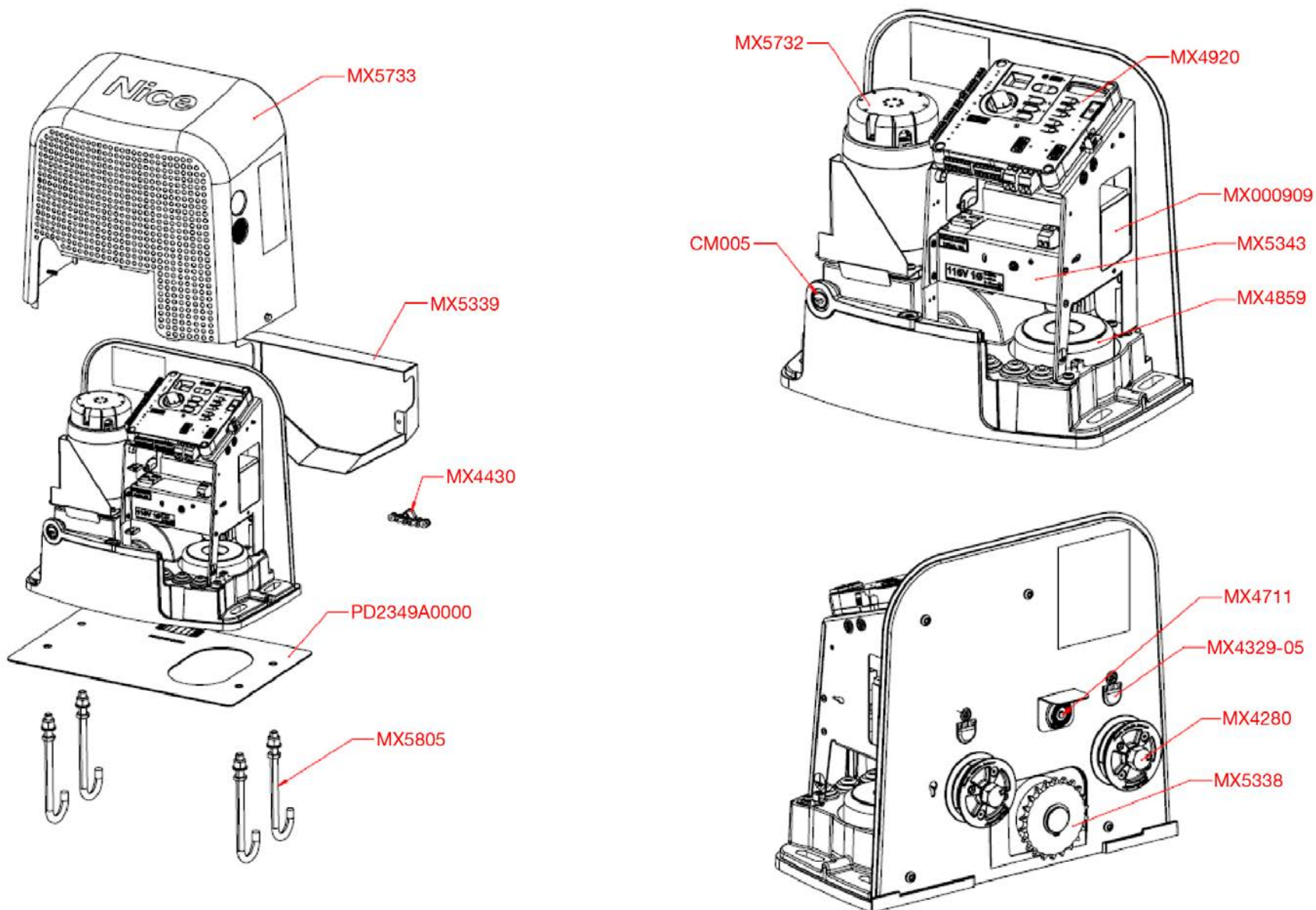
Era One, 2 and 4-channel remote transmitter with visor clip is an ideal and sleek design solution to control multi-user systems. Inti remote transmitters offer a colorful line of 2-channel miniature transmitters, available in six colors.

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Juno Parts Diagrams



Nice

Juno Parts Diagrams

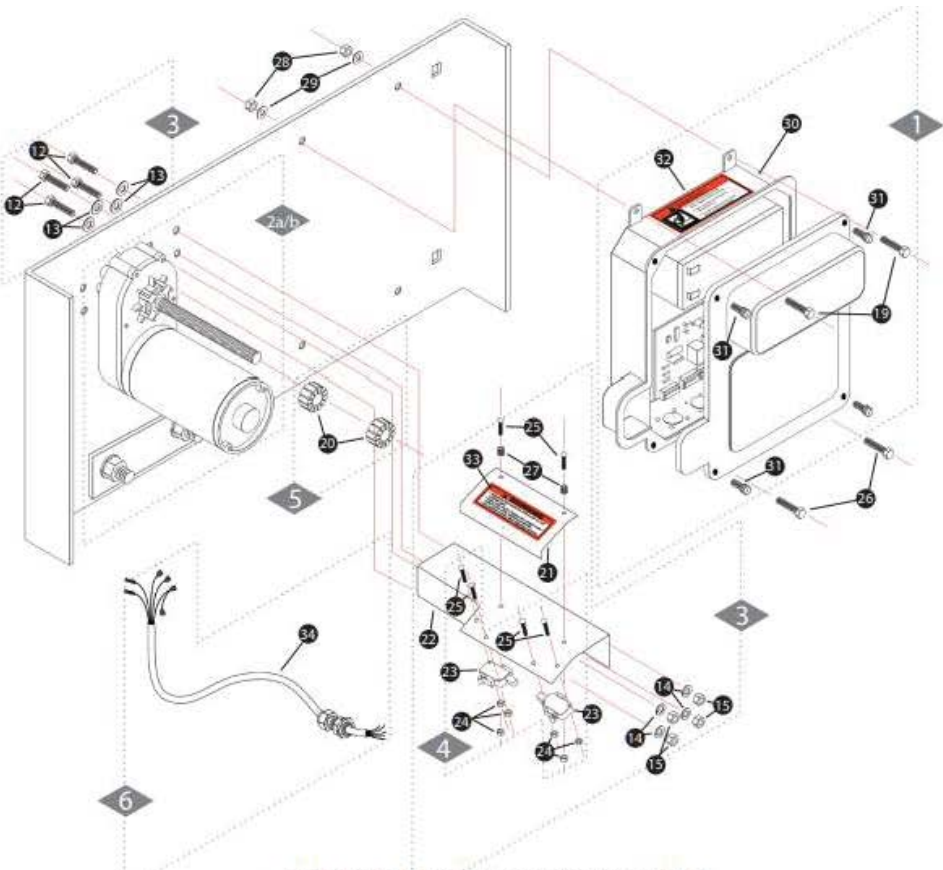
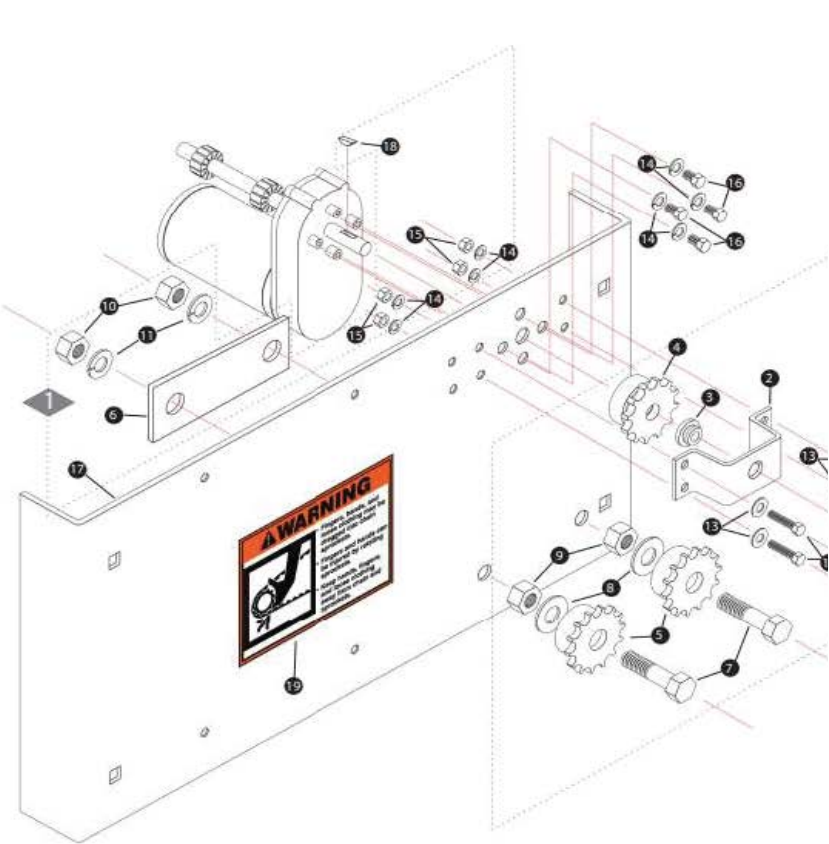
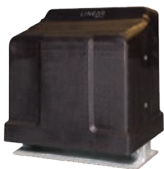


Replacement Parts List

Part Number	Description
MX5733	uno cover assembly
MX5339	Juno chain cover
MX4430	Target magnet assembly
PD2349A0000	Juno foundation plate
MX5805	Juno anchor hardware kit
MX5732	Juno motor assembly
CM005	Juno lock and key assembly
MX4920	Mercury 310 control board
MX000909	12VDC, 8AH battery
MX5343	Juno power supply assembly
MX4859	Transformer
MX4711	Alarm/buzzer
MX4329-05	Target magnet sensor
MX4280	Idler assembly
MX5338	main drive sprocket

Nice

PRO-SL2000B/SL2200B Diagrams

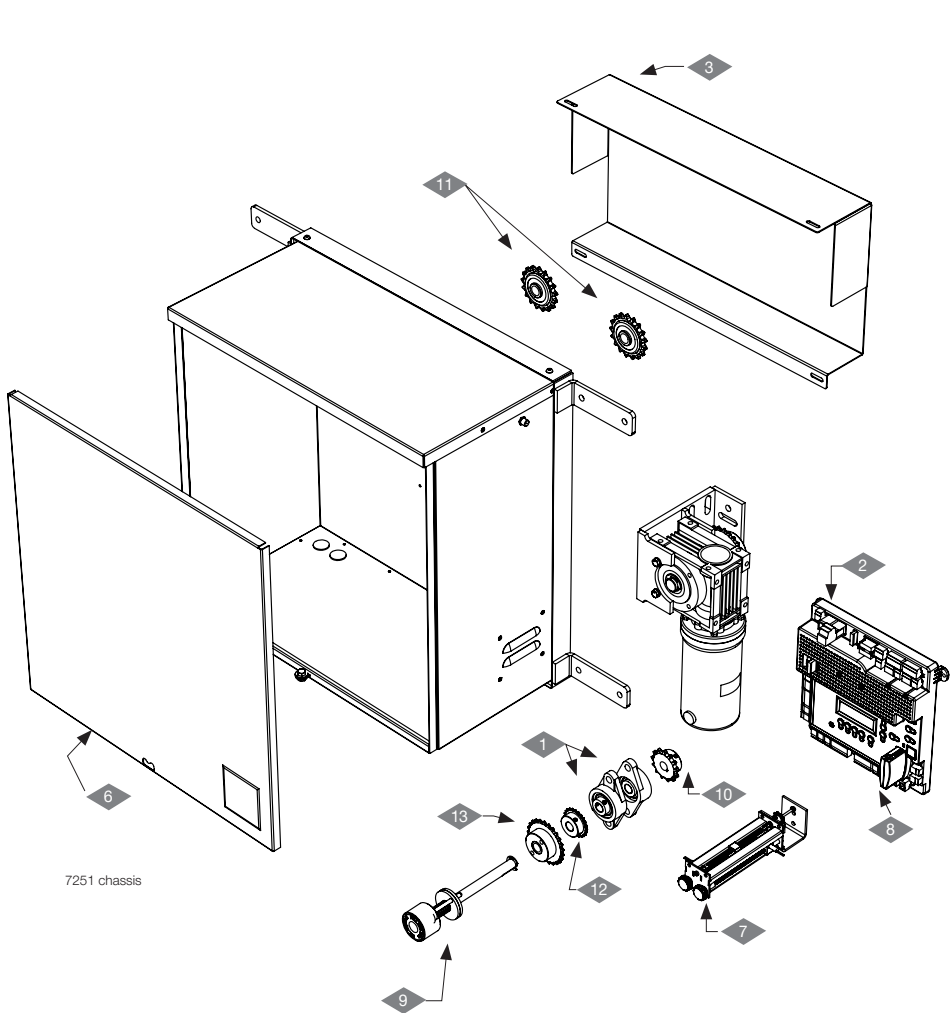


Replacement Part Kits		(Individual parts not available)	
Item Number	Part Number	Description	Parts Included
1	R4423	DC Slider Sprocket Assembly Kit	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 18
2b	RB205B	Gear Motor with Brake (SL2000B/SL2200B)	Gear Motor, 18

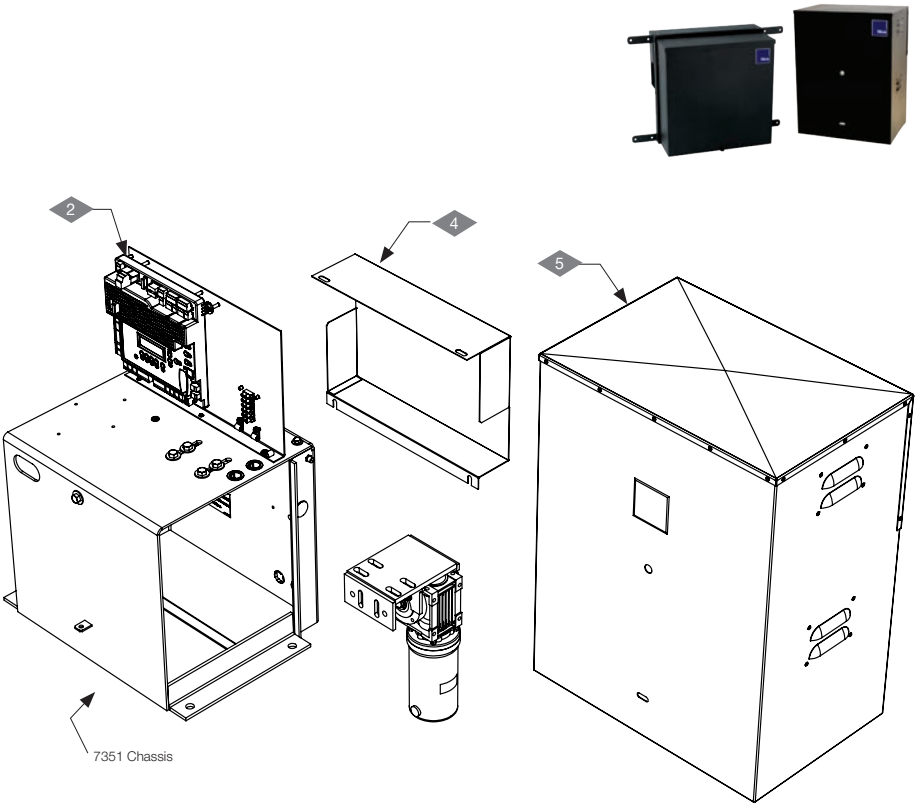
Replacement Part Kits		(Individual parts not available)	
Item Number	Part Number	Description	Parts Included
4	R4421	DC Slider Limit Switch Kit (includes 2 switches and mounting hardware)	23, 24, 25

Nice

7251/7351 Slide Diagrams



This drawing is a representation and should be used for parts reference only.

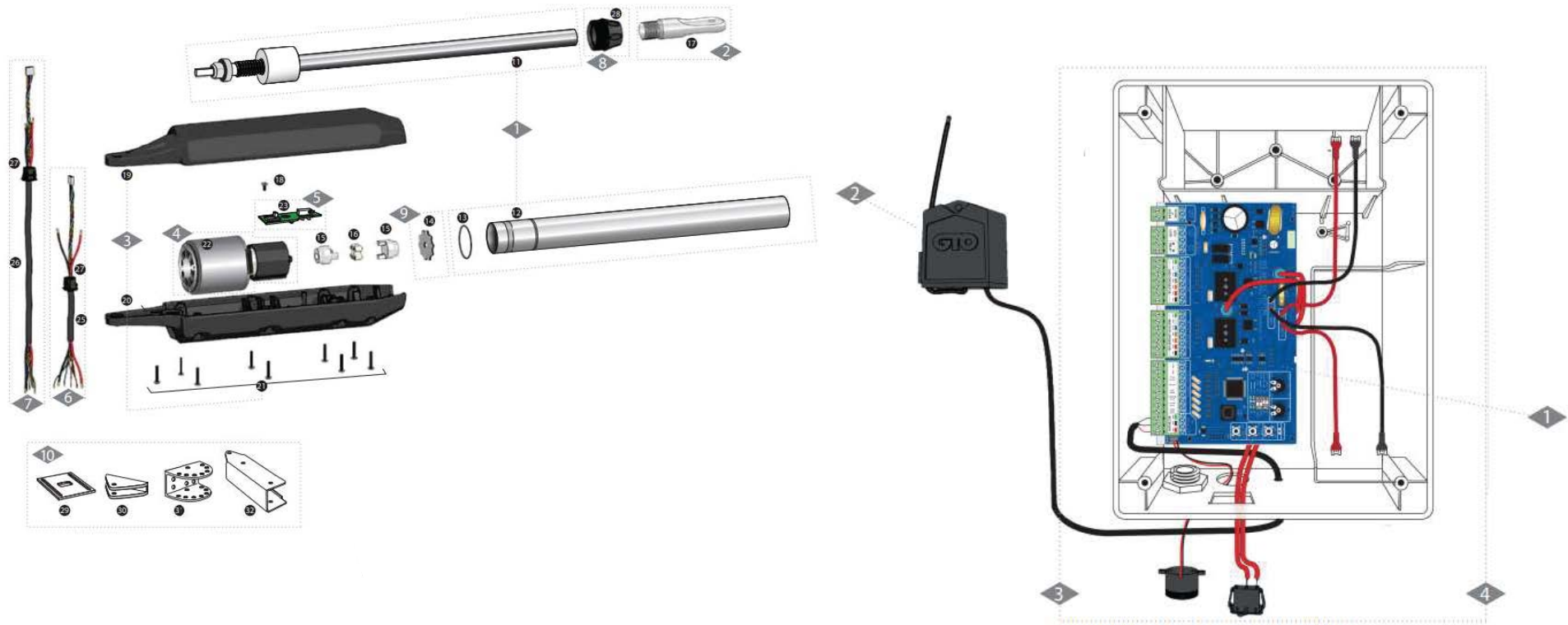


Replacement Parts List

Item Number	Part Number	Description	7251/7351 Models
1	UCFL202	Bearing, Flange	all
2	1050US	Board, Control, 1050	all
3	10032590	Chain Cover, 7251	7251
4	10030590	Chain Cover, 7351	7351
5	10030490	Cover, 7351	7351
6	10053890	Lid, Control Box	7251
7	10040390	Limit Sub Assembly	all
8	OXIBD/A	Receiver, OXI, Multi Channel	all
9	10039790	Release, Quick	all
10	40BS13	Sprocket, Drive, #40 Chain, 13 Tooth	all
11	40BB17H	Sprocket, Idler	all
12	25B24	Sprocket, Limit, Quick Release	all
13	35B25	Sprocket, Quick Release	all

Nice

PRO-SW3000/3200XLS Diagrams



PRO-SW3000/3200XLS Replacement Parts List

(individual parts not available)

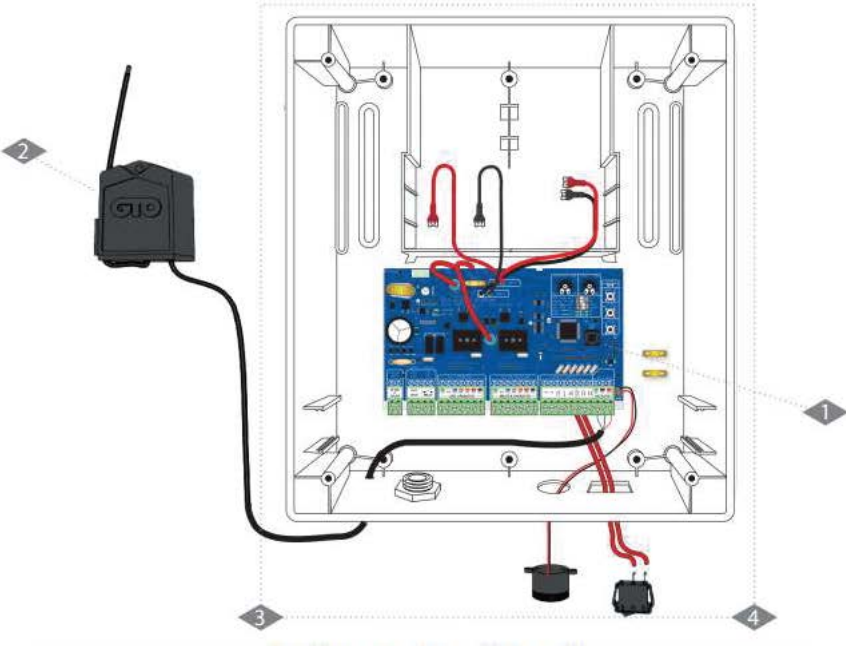
Item Number	Part Number	Description	Parts Included
2	R4886	Front Mount Repair Kit 3000XLS	17
3	R4414	Aluminum Housing Kit 3000XLS	19, 20, 21
5	R4918	Magnetic Rev Counter Board 3000XLS	23
6	R4887	Power Cable Kit 3000XLS 6'	25, 27
7	R4889	Power Cable Kit 3200XLS 40'	26, 27
8	R4708	Scraper Seal Kit 3000XLS	28
9	R4880	Magnetic Rev Counter Wheel 3000XLS	14

PRO-SW3000XLS Control Box Parts List

Item Number	Part Number	Description
1	R5211	3 Gen Dual w/Plug Control Board
2	AQ201 - NB	Narrow Band receiver and 10' Cable
3	R5501	Empty control Box Less #1,2,3,4
4	R5500	Loaded Control Box for 3000XLS/3200XLS/4000XLS/4200XLS

Nice

PRO-SW4000/4200XLS Diagrams



PRO-4000/4200XLS Replacement Part Kits

(individual parts not available)

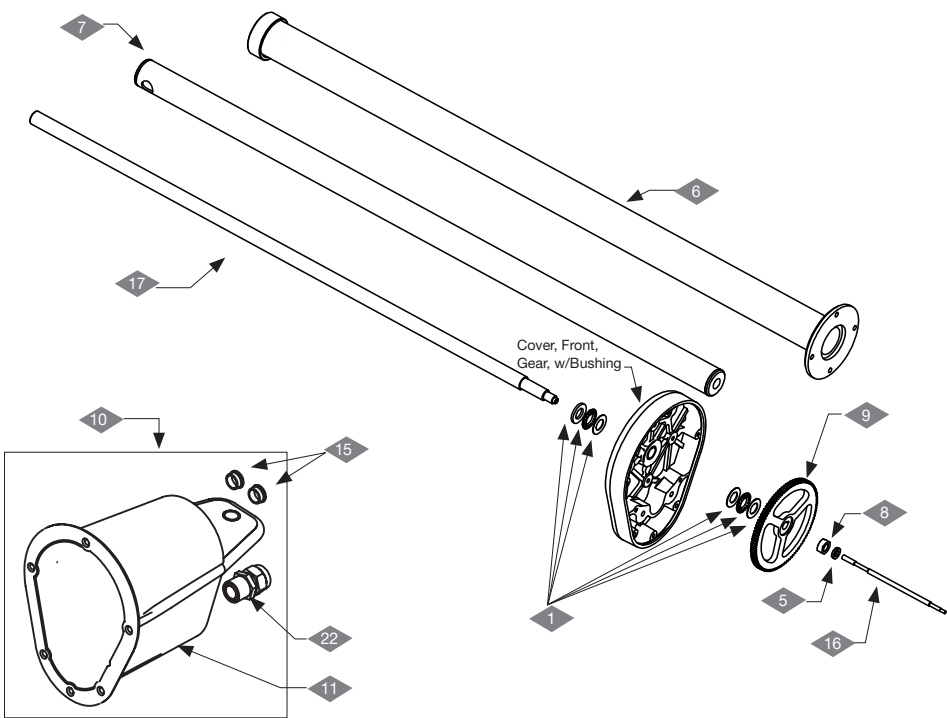
Item Number	Part Number	Description	Parts Included
5	R4918	Magnetic Rev counter Board 4000XLS	23
6	R4887	Power Cable Kit 4000XLS 6'	25,27
7	R4889	Power Cable Kit 4200XLS 50'	26,27
8	R4708	Scraper Seal Kit 4000XLS	28
9	R4880	Magnetic Rev Counter Wheel 4000XLS	14
10	HB4000	Bracket Box	29,30, 31, 32

PRO-SW4000XLS Control Box Parts Lists

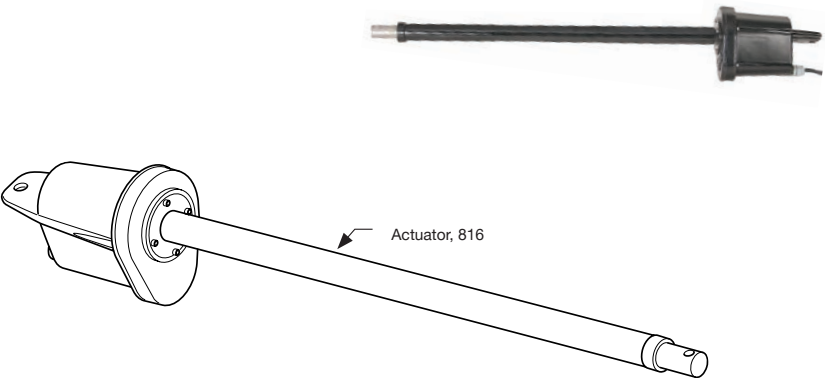
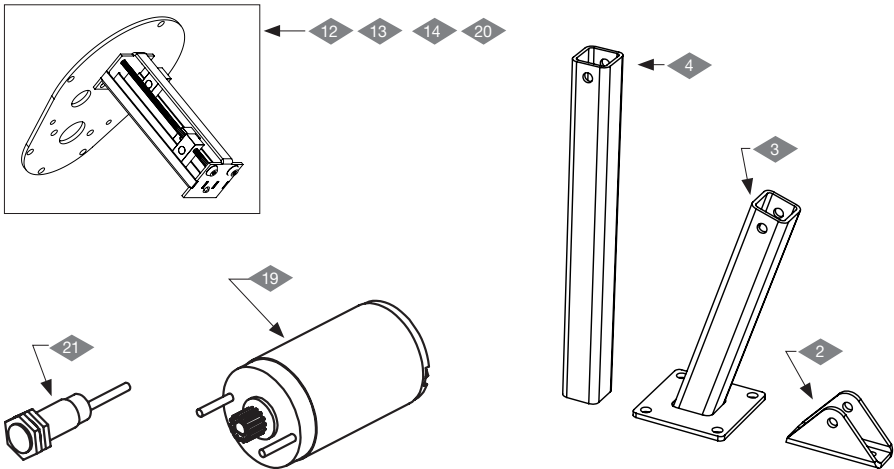
Item Number	Part Number	Description
1	R5211	3 Gen Dual w/Plug Control Board
2	AQ201 - NB	Narrow Band receiver and 10' Cable
3	R5501	Empty control Box Less #1,2
4	R5500	Loaded Control Box for 3000XLS/3200XLS/4000XLS/4200XLS

Nice

Apollo Linear Actuator Diagrams



Limit Switch and Bracket Assembly

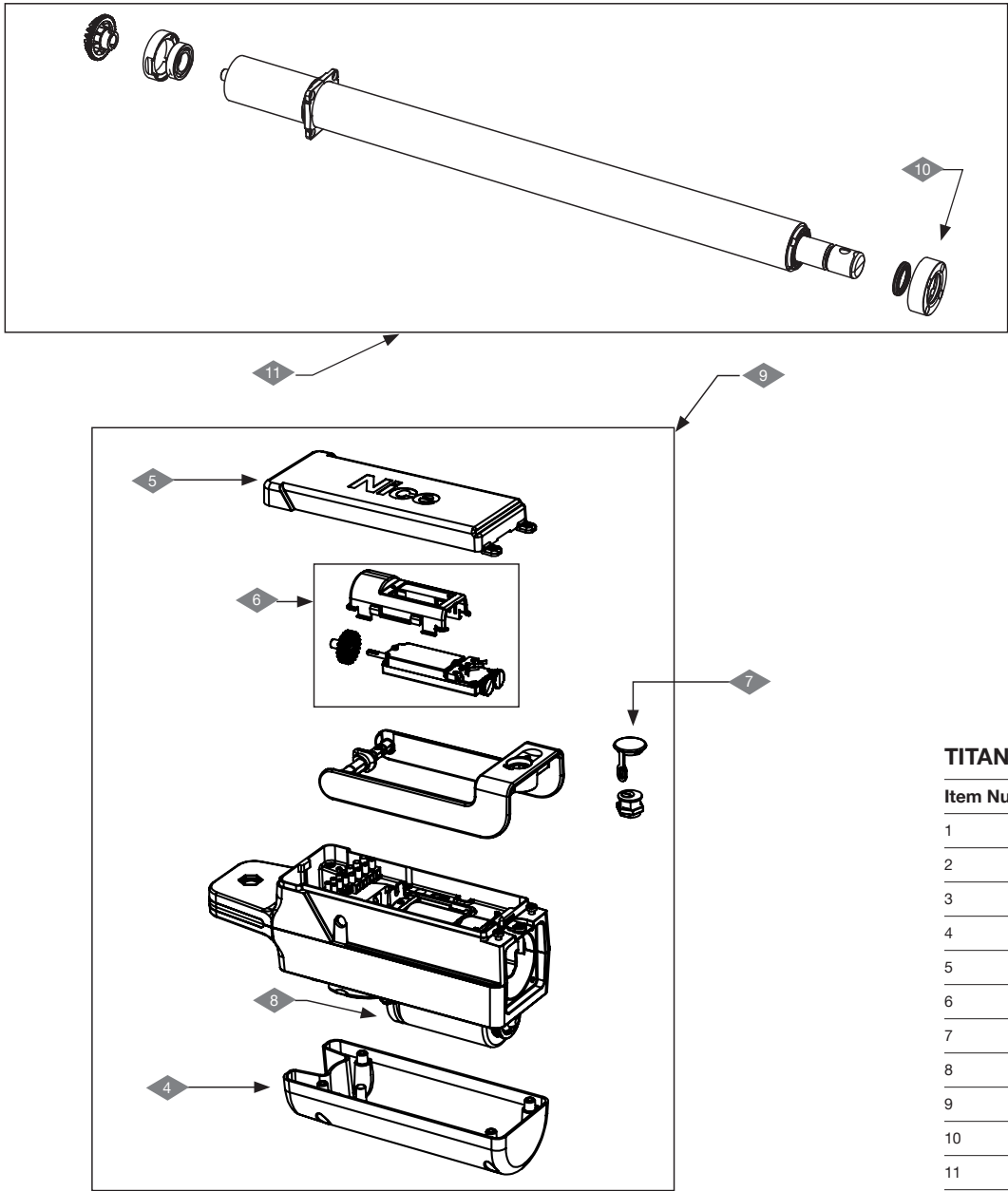


Apollo 816 Actuator Replacement Parts List

Item Number	Part Number	Description
1	A2087	Bearing Kit
2	10015290	Bracket, Gate Attach, Kit
3	446	Bracket, Pivot, Bolt-On
4	10055490	Bracket, Pivot, Kit, Single & Dual
5	A2052	Bushing, Limit Plate
6	A2024K	Cover Tube, Seal Housing Kit
7	A2027	Extension tube
8	A2006	Gear Nut, AC
9	A2017	Gear, Spur
10	A2012	Housing, Rear, Kit
11	A2012K	Housing, Rear, w/Bushings
12	A2002	Limit Block w/Magnet
13	A2003P	Limit Block, Plastic, No Switch
14	A2005	Limit Bolt, Proximity
15	A2010	Limit Cap and Seal Kit
16	A2019	Limit Screw
17	A2018	Main Screw
18	A2086	Main Screw Kit (not shown)
19	A2014	Motor and Pinion Gear
20	A2004	Proximity Switch
21	A2072	Sensor, Smart
22	A2029	Strain Relief

Nice

TITAN Linear Actuator Diagrams



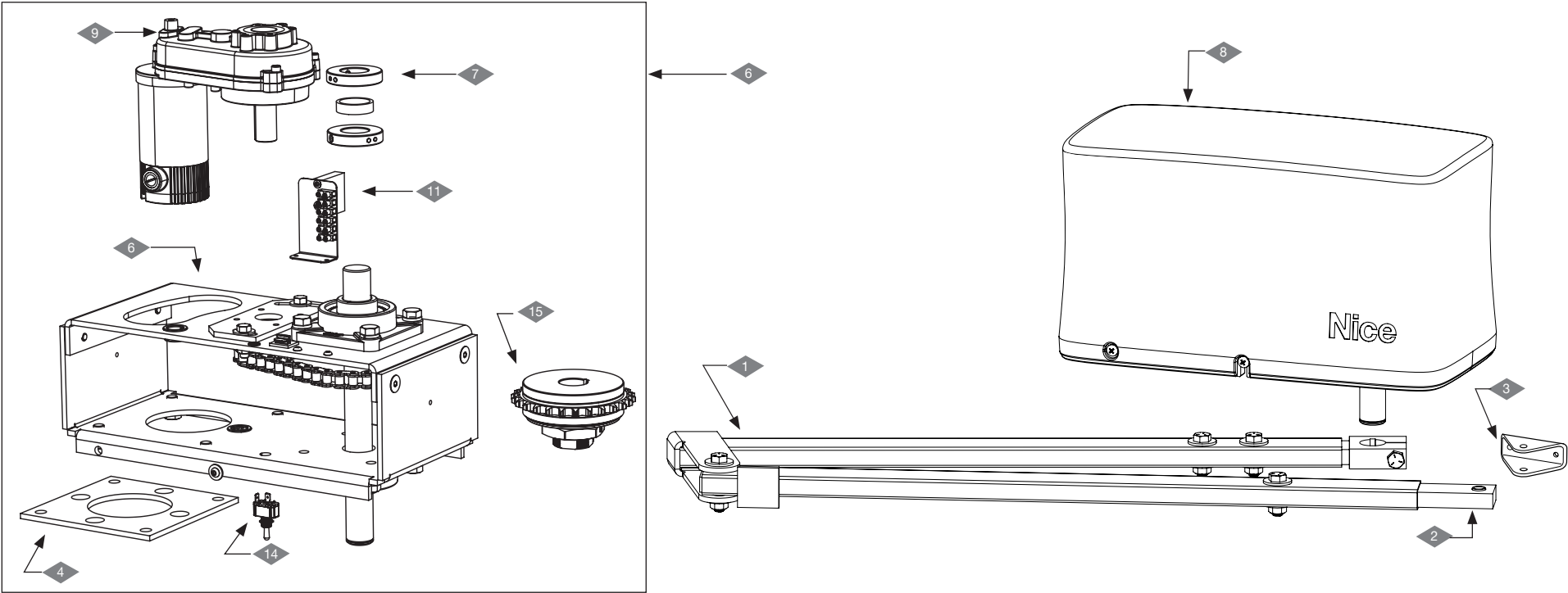
This drawing is a representation and should be used for parts reference only.

TITAN 912 Actuator Replacement Parts List

Item Number	Part Number	Description
1	10015290	Bracket, Gate Attach Kit
2	446	Bracket, Pivot, Bolt-On
3	10055490	Bracket, Pivot, Kit, Single & Dual
4	PD0929A3000	Cover, Motor, Bottom
5	PD0942A3000	Cover, Upper
6	SPSWLSM-01	Limit Switch
7	10070000	Lock Cylinder Kit, Key and Latch
8	SPSW912-01	Motor, Electric, 12V
9	SPAMG205A00	Motor, Electric, 12V, Complete
10	SPTTN03	Seal and Housing
11	SPAMG206A00	Tube, Assembly, 912L

Nice

Vanguard 3501 Swing Diagrams



This drawing is a representation and should be used for parts reference only.

Vanguard 3501 Replacement Parts List

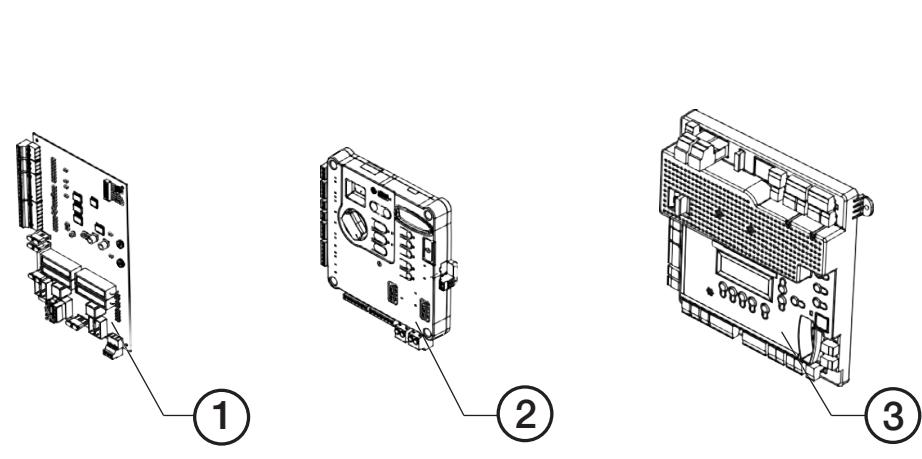
Item Number	Part Number	Description
1	ABOX35	Arm Assembly
2	10021790	Arm Assembly, Adjuster
3	10021290	Bracket, Gate Attach Kit
4	10038315	Bracket, Post Mount
5	MX5622	Chain, #50
6	CHBOX35	Chassis Assembly, 3501
7	10021490	Collar and Magnet
8	MX4774	Cover, Plastic

Vanguard 3501 Replacement Parts List

Item Number	Part Number	Description
9	MX5420	Motor Assembly
10	MX5421	Motor Assembly (retrofit kit for units with 1050US controller. Not shown)
11	10058890	Limit Block Assembly
12	MX5624	Sprocket
13	TB-8	Terminal Block
14	10024290	Toggle Switch
15	10040690	Torque Limiter

Nice

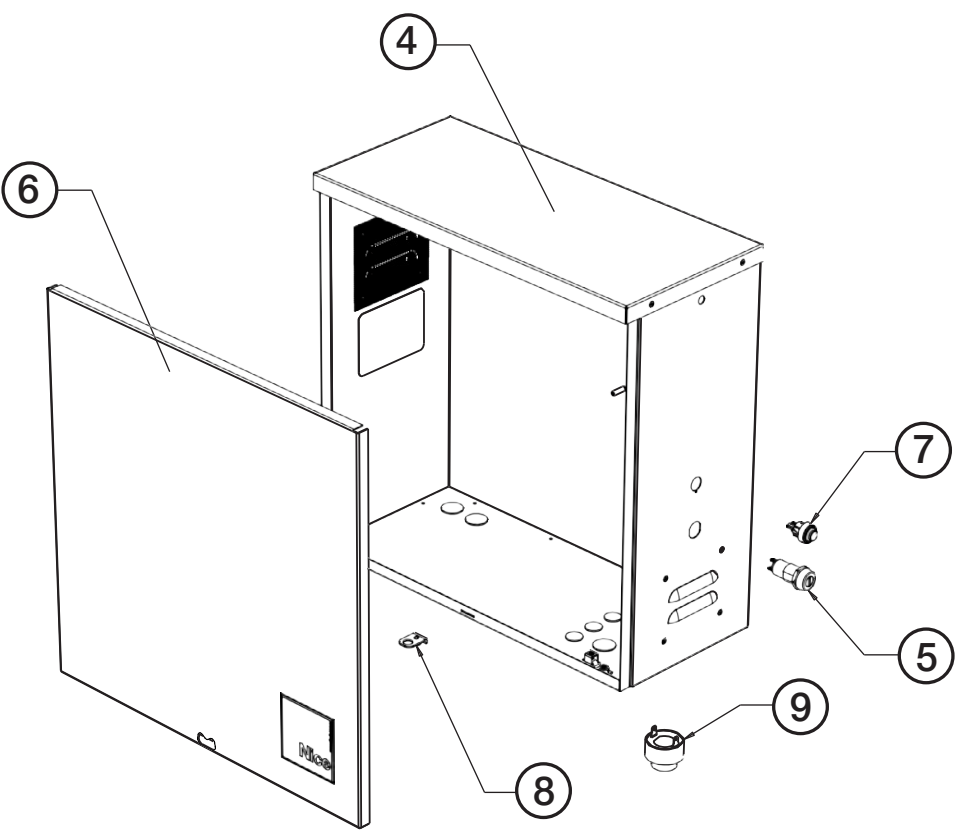
CBOX Diagrams and Controllers



This drawing is a representation and should be used for parts reference only.

CBOX and Controller Replacement Parts List

Item Number	Part Number	Description
1	636US	Board, Control, 636
2	MX4920	Controller, Mercury 310
3	1050US	Controller, 1050US
4	11111B	Box, Control, CBOX, No Control Board

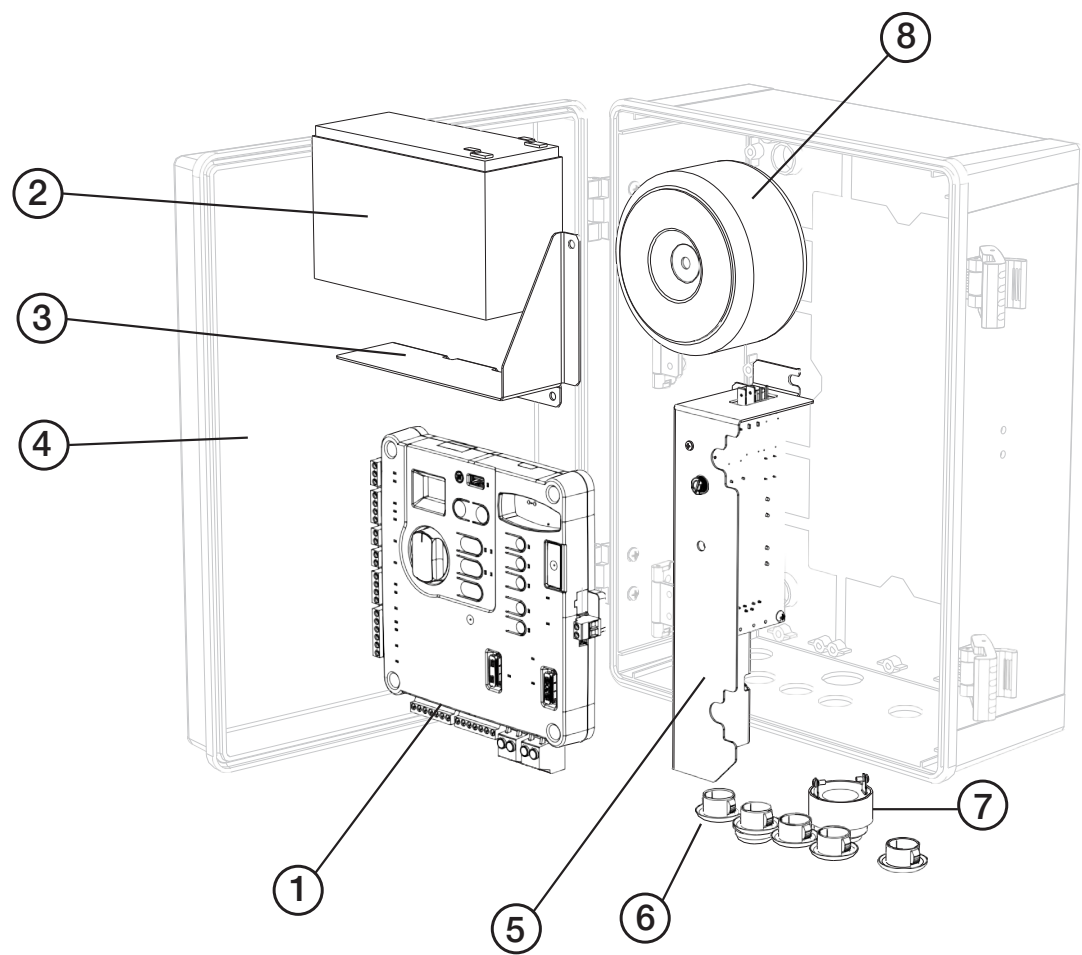


CBOX and Controller Replacement Parts List

Item Number	Part Number	Description
5	1115	Key Switch, Single Pole
6	10016215	Lid, 11111B, CBOX
7	1119	Switch, Push Button, Control Box
8	10020915	Tab, Replacement
9	MX4711	Buzzer, Piezo, 100dB

Nice

ACBOX Diagrams



This drawing is a representation and should be used for parts reference only.

ACBOX Replacement Parts List

Item Number	Part Number	Description
1	MX4920	Controller, Mercury 310
2	MX000909	Battery, 12V, 7Ah
3	MX4907	Shelf, Battery
4	MX4632	Enclosure, PC, ACBOX

ACBOX Replacement Parts List

Item Number	Part Number	Description
5	MX4860	Power Distribution Box
6	MX4668	Plug, Liquid Tight, 0.875"
7	MX4711	Buzzer, Piezo, 100dB
8	MX4859	Transformer, 19VAC, 250VA

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